

**Kentucky Energy and Environment Cabinet
Department for Environmental Protection
Division of Waste Management**

HAZARDOUS WASTE MANAGEMENT FACILITY PERMIT

Modification

Blue Grass Army Depot
431 Battlefield Memorial Highway
Richmond, Kentucky 40475-5060
EPA ID: KY8-213-820-105, AI: 2805

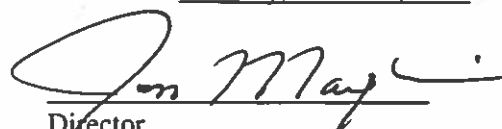
The Division of Waste Management hereby grants the above-named facility a permit to engage in activity specified below. This permit has been issued under the provision of KRS Chapter 224 and regulations promulgated pursuant thereto and is subject to all conditions and operating limitations contained herein. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet and/or other federal, state, and local agencies.

Part I	-Legal Authority
Part II	-Standard Conditions
Part III	-Specific Conditions
	-Land Disposal Restrictions
	-RCRA Air Emission Standards
Part IV	-Corrective Action
Part V	-Referenced Attachments
Part VI	-Waste Minimization

No deviation from the plans and specifications submitted with your application or the conditions specified herein is allowed, unless authorized in writing from the Division of Waste Management. Violation of the terms and conditions specified herein shall render this permit null and void. All rights of inspection by representatives of the Division of Waste Management are reserved. Conformance with all applicable Waste Management Regulations is the responsibility of the permittee. Receipt of the permit fee and financial assurance specified below is hereby acknowledged.

PERMIT TYPE:	RD&D	PERMIT NUMBER:	KY8-213-820-105
TYPE OF ACTIVITY:	Treatment and Storage	COUNTY:	Madison
PERMIT FEE:	NA	MODIFICATION EFFECTIVE DATE:	
CLOSURE AMOUNT:	NA		<u>April 27, 2018</u>
POST-CLOSURE AMOUNT:	NA	PERMIT EXPIRATION DATE:	
CLOSURE INSTRUMENT:	Federal Facility		<u>365 days of treating hazardous waste</u>
POST-CLOSURE INSTRUMENT:	Federal Facility		
SUDDEN LIABILITY INSURANCE:	NA		
HAZARDOUS WASTE MANAGEMENT UNITS:	See Conditions B.III.I.(10), B.III.J.(9), and B.III.X.(4)		
NON-SUDDEN LIABILITY INSURANCE:	NA		

Issued this 28th day of March, 2018



Director
Division of Waste Management

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Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP)

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PART I LEGAL AUTHORITY

B.I.A. PERMITTEE

Pursuant to the Kentucky Revised Statutes Chapter 224 and the Kentucky Administrative Regulations Title 401 adopted pursuant thereto by the Kentucky Energy and Environment Cabinet (hereinafter referred to as "the Cabinet"), a Research, Development and Demonstration (RD&D) permit is issued to the U.S. Department of the Army, Blue Grass Army Depot (BGAD), and to Bechtel Parsons Blue Grass Joint Venture (BPGJ) (individually and collectively hereinafter referred to as "the Permittee"), for hazardous waste management activities at 431 Battlefield Memorial Highway, Richmond, Kentucky, [REDACTED] for the Blue Grass Chemical Agent Destruction Pilot Plant (BGCAPP).

BGCAPP includes the Container Handling Building (CHB), Munitions Demilitarization Building (MDB), Supercritical Water Oxidation (SCWO) Processing Building (SPB), Hydrolysate Storage Area (HSA), SCWO Tank Area (STA), Waste Transfer Station (WTS) and related facilities. The location of BGCAPP (Main Plant) is shown in Figure B-2 of the Research, Development and Demonstration (RD&D) Permit Application dated October 11, 2017. BGCAPP does not include the Explosive Destruction Technology (EDT) Facility unless stated otherwise.

The Owner and Operator are co-permittees.

The Facility Owner is:

U.S. Department of the Army
431 Battlefield Memorial Highway
Richmond, Kentucky 40475-5001

The Facility Operator is:

Bechtel Parsons Blue Grass Joint Venture (BPGJ)
830 Eastern Bypass, Suite 106
Richmond, Kentucky 40475

[KRS 224.46.520, KRS 224.50-130, 401 KAR 39:005 Section 1, 401 KAR 39:060 Section 5, 40 CFR 270.65, 40 CFR 270.10]

B.I.B. APPLICATIONS

This permit is based on the assumption that the information in the permit applications listed in the table below, (herein referred to as the "permit application") is accurate and that the facility shall be operated as specified in the permit application and this permit. The permit application and modification request are hereby incorporated into this permit.

Resource Conservation and Recovery Act Research, Development and Demonstration Permit Application Revision 2	dated November, 2004
Research, Development and Demonstration (RD&D) Permit Application – Revision 6 and 6a	dated November 12, 2015 and amended on February 15, 2017 and October 11, 2017
Research, Development and Demonstration (RD&D) Permit - Class 2 Permit Modification Request	dated November 12, 2015 and amended on February 15, 2017 and October 11, 2017

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Any inaccuracies found in the permit application could lead to the termination or modification of this permit and potential enforcement action. The Permittee shall inform the Kentucky Division of Waste Management (hereinafter referred to as "the Division") of any deviation from or changes in the information in the permit application which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

[401 KAR 39:060 Section 5, 40 CFR 270.30, 40 CFR 270.32, 40 CFR 270.42]

B.I.C. EFFECTIVE DATE

This permit is effective and shall remain in effect as stated on the signature page of this permit, unless revoked and reissued, or terminated.

[401 KAR 39:060 Section 5, 40 CFR 270.41, 40 CFR 270.43, and 40 CFR 270.50]

B.I.D. PARTS OF THE PERMIT

The Permittee shall comply with all terms and conditions of the permit. This permit consists of the conditions set forth in:

- Part I Legal Authority
- Part II Standard Conditions
- Part III Specific Conditions
- Part IV Corrective Action
- Part V Referenced Attachments
- Part VI Waste Minimization

[401 KAR 39:060 Section 5, 40 CFR 270.32, KRS 224.46-530]

B.I.E. SECTIONS OF THE PERMIT

Not Applicable

B.I.F. REGULATIONS AND STATUTES

Applicable regulations and statutes are those which are in effect on the date of issuance, modification, or reissuance of this research, development and demonstration permit.

[401 KAR 39:060 Section 5, 40 CFR 270.65, KRS 224.46-530]

PART II STANDARD CONDITIONS

B.II.A. EFFECT OF THE PERMIT

Compliance with the terms of this permit constitutes compliance for purposes of enforcement with KRS Chapter 224, except for those requirements not included in the permit which become effective by statute, are promulgated under 401 KAR 39:060 Section 4 (Land Disposal Restrictions) restricting the placement of hazardous wastes in or on the land, or are promulgated under 401 KAR 39:090 Section 1, 40 CFR 264 Subpart

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AA, 40 CFR 264 Subpart BB, 40 CFR 264 Subpart CC, (Air Emission Standards).

This Permit is issued pursuant to KRS 224.46. Issuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any order issued or any action brought under Sections 3008(a), 3008(h), 3013, or 7003 of the Resource Conservation and Recovery Act (RCRA) of 1976; Sections 104, 106(a), or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (42 U.S.C. 9601 et seq.), the equivalent state statutes, or any other law governing protection of public health or the environment for any imminent and substantial endangerment to human health, welfare, or the environment.

The Permittee shall treat, store, and/or dispose of hazardous waste on-site; ship/receive hazardous waste; perform post-closure care; and/or perform corrective action in accordance with the Conditions of this Permit. Any storage, treatment, and/or disposal of hazardous waste not authorized in this Permit is prohibited, except as allowed by the Kentucky Hazardous Waste Management Regulations, 401 KAR Chapter 39 and 401 KAR Chapter 40 (40 CFR 239-282).

[See list in condition]

B.II.B. PERMIT ACTIONS

B.II.B.(1) Permit Modification, Revocation and Reissuance, Termination

This permit may be modified, revoked and reissued, or terminated for cause as specified in 401 KAR 39:060 Section 5 [40 CFR 270.30, 40 CFR 270.40-43, 40 CFR 124.5(a), 40 CFR 270.10(b)-(d)], and 401 KAR 40:040 Section 1. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee, does not stay the applicability or enforceability of any permit condition.

[See list in condition]

B.II.B.(2) Severability: Modification, Suspension, and Revocation of a Permit

The Cabinet may modify, suspend, or revoke this permit for:

- Violation of any requirement of KRS Chapter 224 or the respective administrative regulations promulgated pursuant thereto
- Aiding, abetting, or permitting the violation of any provisions of 401 KAR Chapters 39 and 40
- Any action or omission associated with maintenance and operation of the facility that could or does create a threat to public health or the environment
- Violation(s) of a condition(s) of this permit
- Misrepresentation or omission of a significant fact by the Permittee either in the application(s) for the permit or in information subsequently reported to the Cabinet
- Failure to comply with an order issued by the Cabinet

[401 KAR 40:040 Section 1, KRS 224.10-100]

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B.II.B.(3) Severability - Invalid Provision

The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected or diminished.

[401 KAR 39:060 Section 2]

B.II.B.(4) Permit Renewal

This Permit may be renewed as specified in Permit Condition B.II.B.(5). Review of any application for a Permit renewal shall also consider improvements in the state of control and measurement technology, as well as changes in applicable regulations.

[401 KAR 39:060 Section 5, 40 CFR 270.30, 40 CFR 270.65]

B.II.B.(5) Permit Expiration and Continuation

This Permit shall be effective for one (1) year after the receipt of hazardous waste, unless revoked and reissued, or terminated. This Permit may be renewed not more than three (3) times. Each renewal shall be for a period of not more than one (1) year. Any time hazardous waste is treated in a calendar day at the facility, that day is counted toward one year (365 days).

[401 KAR 39:060 Section 5, 40 CFR 270.65]

B.II.B.(6) Permit Modification for Corrective Action Plan

Not applicable.

B.II.B.(7) New Statutes, Standards, or Administrative Regulations

The Cabinet may modify this permit when the standards or administrative regulations on which this permit is based have been changed by statute, amended standards, administrative regulations, or by judicial decision after the permit was issued.

[401 KAR 39:060 Section 5, 40 CFR 270.41(a)(3)]

B.II.C. DEFINITIONS

For the purpose of this permit, terms used herein shall have the same meaning as those in Title 401 of Kentucky Administrative Regulations and listed here. Where terms are not otherwise defined, the meaning associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

B.II.C.(1) "Area of Concern" (AOC)

Area of Concern includes any area having evidence of a release or a probable release of a hazardous waste or hazardous waste constituent which is not from a Solid Waste Management

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Unit and is determined by the Permittee and/or the Manager to pose a current or potential threat to human health or the environment. Such AOCs may require investigations and remedial action as required in order to ensure adequate protection of human health and/or the environment.

[KRS 224.46-530(1)(g)]

B.II.C.(2) "Blister or Nerve Agent"

Blister or nerve agent means a compound listed below, and related compounds:

- N001 GB (isopropyl methyl phosphonofluoridate)
- N002 VX (O-ethyl-S-(2-diisopropylaminoethyl) methyl phosphonothiolate)
- N003 H (bis(2-chloroethyl) sulfide), and related compounds

[KRS 224.50-130(2), 401 KAR 39:060 Section 3]

B.II.C.(3) "Chemical Hazardous Waste Storage Units"

Chemical hazardous waste storage units are the individual container storage areas (munitions igloos) for the storage of chemical munitions and/or Chemical Related Hazardous Waste. These units are located in the Chemical Limited Area.

[KRS 224.46-530(1)(g)]

B.II.C.(4) "Chemical Limited Area" (CLA)

Chemical limited area means that portion of the facility enclosed in a double fence which contains the Chemical Hazardous Waste Storage Units, and support structures, as well as the demilitarization facilities once they are included in the double fence.

[KRS 224.46-530(1)(g)]

B.II.C.(5) "Chemical Munitions"

Chemical munitions are assembled projectiles or rockets containing chemical warfare agent including GB, VX, or H.

[KRS 224.50-130(2)]

B.II.C.(6) "Chemical Related Hazardous Waste"

Chemical related hazardous waste means all chemical agent related hazardous waste received by and generated by the Blue Grass Chemical Agent-Destruction Pilot Plant.

[KRS 224.46-530]

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B.II.C.(7) "Contamination"

Contamination means the degradation of naturally occurring water, air, or soil quality either directly or indirectly as a result of human activities.

[401 KAR 39:005 Section 1, 401 KAR 40:001 Section 1(2)]

B.II.C.(8) "Corrective Action"

Corrective action means all corrective actions/measures necessary to protect human health and the environment from any releases of hazardous waste or hazardous waste constituents from a Solid Waste Management Unit at the facility, regardless of the time at which waste was placed in the unit. Corrective action may address releases to air, soils, surface water sediment, groundwater, or subsurface gas.

[KRS 224.46-530(1)(g)]

B.II.C.(9) "Destruction and Removal Efficiency" (DRE)

Destruction and removal efficiency (DRE) of nerve agent is calculated by:

$$\text{DRE \%} = (\text{Win} - \text{Wout}) \times 100\% / \text{Win}$$

Where:

Win = Mass feed rate of waste into the process

Wout = Mass emission rate of the same waste out of the process

Treatment shall be sufficient to provide assurance of destruction or neutralization and removal efficiency of ninety-nine and nine thousand, nine hundred, and ninety-nine ten thousandths percent (99.9999%) for nerve agent, with the efficiency to be demonstrated as achievable under all operating conditions. During the occurrence of malfunctions, upsets, or unplanned shutdowns, nerve agent shall be contained, reprocessed, or otherwise controlled so as to ensure that the required efficiency is attained prior to any release to the environment.

[KRS 224.50-130(3), 401 KAR 39:090 Section 6]

B.II.C.(10) "Director"

Director is a reference to the Director of the Division of Waste Management. The terms "Cabinet", "Division", and "Manager" can be used interchangeably.

[401 KAR 39:005 Section 1]

B.II.C.(11) "Extent of Contamination"

Extent of contamination is the horizontal and vertical area in which the concentrations of hazardous constituents in the environmental media being investigated are above detection limits or background concentrations indicative of the region, whichever is appropriate as determined by the Cabinet.

[KRS 224.46-530(1)(g)]

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B.II.C.(12) "Facility"

- (1) All contiguous land and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste, or for managing hazardous secondary materials prior to reclamation. A facility may consist of several treatment, storage, or disposal operational units (for example: one or more landfills, surface impoundments, or combinations of them).
- (2) For the purpose of implementing corrective action under 40 CFR 264.101 or 40 CFR 267.101, all contiguous property under the control of the owner or operator seeking a permit under Subtitle C of RCRA. This definition also applies to facilities implementing corrective action under RCRA Section 3008(h).
- (3) Notwithstanding paragraph (2) of this definition, a remediation waste management site is not a facility that is subject to 40 CFR 264.101, but is subject to corrective action requirements if the site is located within such a facility.

[401 KAR 39:005 Section 1, 40 CFR 260.10]

B.II.C.(13) "Hazardous Waste"

"Hazardous waste" is defined by KRS 224.1-010(30)(b) and implemented through the criteria established in 40 CFR 261.3.

[401 KAR 39:005 Section 1, 40 CFR 261.3]

B.II.C.(14) "Hazardous Waste Constituent"

Hazardous waste constituent means a constituent that caused the cabinet or EPA to list the waste, or a constituent listed in 401 KAR 39:060, Section 3 and 40 CFR Part 261 Subpart D.

[401 KAR 39:005 Section 1, 40 CFR 261 Subpart D]

B.II.C.(15) "Hazardous Waste Site or Facility"

Hazardous waste site or facility means "hazardous waste management facility" as defined by 40 CFR 270.2.

[401 KAR 39:005 Section 1, 40 CFR 270.2]

B.II.C.(16) "Land Disposal"

Land disposal means placement in or on the land and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, underground mine or cave, or concrete vault or bunker intended for disposal. The temporary storage of hazardous waste in munitions igloos at BGAD, as specified in this permit, is excluded from the definition of concrete vault or bunker.

[KRS 224.01-010(42)]

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B.II.C.(17) "Landfill"

Landfill includes any disposal facility or part of a facility where hazardous waste is placed in or on the land and which is not a pile, a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a corrective action management unit.

[40 CFR 260.10]

B.II.C.(18) "Manager"

Manager is a reference to the Manager of the Hazardous Waste Branch, Division of Waste Management. The terms "Cabinet", "Director", and "Division" can be used interchangeably.

[401 KAR 39:005 Section 1]

B.II.C.(19) "Memorandum of Agreement" (MOA)

A Memorandum of Agreement (MOA), or any other written document is a document that covers the terms, scope, conditions, or other arrangements for services to the facility with an off-site company, group, or government agency.

[KRS 224.46-530]

B.II.C.(20) "Off-site"

Off-site means any site which is not on site.

[401 KAR 39:005 Section 1, 40 CFR 270.2]

B.II.C.(21) "On-site"

On-site means on the same or geographically contiguous property which may be divided by public or private right(s)-of-way, provided the entrance and exit between the properties is at a crossroads intersection, and access is by crossing, as opposed to going along the right-of-way. Non-contiguous property owned by the same person but connected by a right-of-way which that person controls and to which the public does not have access, is also considered on-site property.

[401 KAR 39:005 Section 1, 40 CFR 260.10, 40 CFR 270.2]

B.II.C.(22) "Operator"

Operator is defined by 40 CFR 260.10 and includes any operation of an on-site or off-site waste facility, including any private contractor conducting operational activities at a federal facility.

[401 KAR 39:005 Section 1, 40 CFR 260.10]

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B.II.C.(23) "Owner"

Owner is defined by 40 CFR 260.10 and includes any person who owns an on-site or off-site waste facility or any part of a facility.

[401 KAR 39:005 Section 1, 40 CFR 260.10]

B.II.C.(24) "Pilot Demonstration Testing" (PDT)

For this permit, pilot demonstration testing means any testing performed in accordance with the criteria set forth in the approved Pilot Test Demonstration Plan (PTDP).

B.II.C.(25) "Regulated Units"

Regulated units are any hazardous waste land disposal sites or facilities, or portions of existing hazardous waste land disposal sites or units, which received hazardous waste after January 26, 1983 and are thereby subject to groundwater protection as defined in 401 KAR 39:090 Section 1.

[401 KAR 39:090 Section 1]

B.II.C.(26) "Release"

Release includes any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment of any hazardous waste or hazardous waste constituent.

[KRS 224.1-400(1)(b)&(4)]

B.II.C.(27) "Solid Waste"

Solid waste means any garbage, refuse, sludge, and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining (excluding coal mining wastes, coal mining by-products, refuse, and overburden), or agricultural operations, and from community activities, but does not include those materials including, but not limited to, sand, soil, rock, gravel, or bridge debris extracted as part of a public road construction project funded wholly or in part with state funds, recovered material, tire-derived fuel, special wastes as designated by KRS 224.50-760, solid or dissolved material in domestic sewage, manure, crops, crop residue, or a combination thereof which are placed on the soil for return to the soil as fertilizers or soil conditioners, or solid or dissolved material in irrigation return flows or industrial discharges which are point sources subject to permits under Section 402 of the Federal Water Pollution Control Act, as amended (86 Stat. 880), or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923).

[KRS 224.1-010(30)(a)]

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B.II.C.(28) "Solid Waste Management Unit"

Solid waste management unit means any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. These units include any area at a facility at which solid wastes have been routinely and systematically released.

[401 KAR 39:005 Section 1]

B.II.C.(29) "Treatment"

Treatment means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological characteristic or composition of any waste so as to neutralize such waste or so as to render such waste nonhazardous, safer for transport, amenable for recovery, amenable for storage, or reduced in volume. Such term includes any activity or processing designed to change the physical form or chemical composition of hazardous waste so as to render it nonhazardous.

The term "treatment" also includes the manual or mechanical handling of the chemical agent compounds and of any munitions containing the compounds during the processing of munitions to remove the compounds, to separate munitions components, and to otherwise prepare the components and compounds for destruction, neutralization, dismantling, or decommissioning.

[401 KAR 39:005 Section 1, KRS 224.1-010(29), KRS 224.50-130(5)]

B.II.D. DUTIES AND REQUIREMENTS

B.II.D.(1) Duty to Comply

The Permittee shall comply with all conditions of this permit except to the extent and for the duration that such noncompliance is authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of KRS Chapter 224 and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

[401 KAR 39:060 Section 5, 40 CFR 270.30]

B.II.D.(2) Duty to Reapply

If the Permittee intends to continue an activity allowed or required by this Permit after the expiration date of this Permit, the Permittee shall submit a formal request to renew the permit at least sixty (60) days prior to permit expiration. The Permittee shall comply with the public notice requirements of 401 KAR 39:060 Section 5. The Cabinet may require additional information to ensure protection of human health or the environment.

[401 KAR 39:060 Section 5, 40 CFR 270.30, 40 CFR 270.10(h), 40 CFR 270.10(i)]

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B.II.D.(3) Obligation for Corrective Action

The Permittee is required to continue this Permit for any period necessary to comply with the corrective action requirements of this Permit.

[401 KAR 39:090 Section 1, 40 CFR 264.100(f)]

B.II.D.(4) Need to Halt or Reduce Activity Not a Defense

The Cabinet may order an immediate termination of all operations at the facility at any time it is determined that termination is necessary to protect human health or the environment.

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the Conditions of this Permit.

[401 KAR 39:060 Section 5, 40 CFR 270.30(c)]

B.II.D.(5) Duty to Mitigate

In the event of noncompliance with this Permit, the Permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.

[401 KAR 39:060 Section 5, 40 CFR 270.30(d)]

B.II.D.(6) Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all hazardous waste facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes, but is not limited to, effective performance, adequate funding, adequate operator staffing and training, adequate laboratory and process controls, including appropriate quality assurance procedures, and adequate agent monitoring. This condition requires the operation of backup or auxiliary facilities, equipment, or similar systems when necessary to achieve compliance with the conditions of the permit.

[401 KAR 39:060 Section 5, 40 CFR 270.30(e), 40 CFR 270.31]

B.II.D.(7) Duty to Provide Information

The Permittee shall furnish to the Manager, within a reasonable time, any information which the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit, or to determine compliance with this Permit. The Permittee shall also furnish to the Manager, upon request, copies of records required to be kept by this Permit.

[401 KAR 39:060 Section 5, 401 KAR 39:090 Section 1, 40 CFR 264.74, 40 CFR 270.30(h)]

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B.II.D.(8) Inspection and Entry

The Permittee shall allow an authorized representative of the Division, upon the presentation of credentials and other documents, as required by law to:

- Enter at reasonable times upon the Permittee's premises where a regulated activity is located or conducted, or where records shall be kept under the conditions of this permit
- Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this permit
- Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated as required under this permit
- Sample or monitor, at reasonable times, any non-surety material at any location, for the purpose of assuring permit compliance as authorized by the Kentucky Revised Statutes
- Split samples of any non-surety materials, and copies of analysis shall be provided to the Permittee or Division upon request

[401 KAR 39:060 Section 5, 40 CFR 270.30(i)]

B.II.D.(9) Facility Construction Certification/New Units

The Permittee shall not begin treatment or storage of hazardous wastes in any new Hazardous Waste Management Unit, until the Permittee has complied with the following:

- The Permittee has submitted to the Manager by certified mail or hand delivery, a letter signed by the Permittee and a professional engineer (PE) licensed in the Commonwealth of Kentucky stating that the Hazardous Waste Management Unit has been constructed in accordance with this permit. A licensed PE, employed by the government, does not have to be licensed in the Commonwealth of Kentucky (KRS 322.030(2)).
- The Permittee has received confirmation that the appropriate Cabinet personnel has inspected the new Hazardous Waste Management Unit and has determined that the new unit is in compliance with the conditions of this permit; or
- The Permittee has received confirmation that the Cabinet has either waived the inspection, or has within fifteen (15) days, notified the Permittee of the Cabinet's intent to not inspect.

[401 KAR 39:060 Section 5, 40 CFR 270.30(i)]

B.II.D.(10) Monitoring and Records

B.II.D.(10)(a) Sampling Methods

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample shall be the appropriate method from 401 KAR 39:060 Section 3, or an equivalent method if specified in the application, or otherwise approved by the Manager. Laboratory methods shall be those specified in the most recent edition of Test Methods for Evaluating Solid Waste: Physical/ Chemical Methods SW-846, Standard Methods of Wastewater Analysis, methods listed in the Waste Analysis Plan (WAP) or an equivalent method approved by the Manager and in compliance with applicable regulations. Changes to agent analytical methods that have been approved by Program Executive Office, Assembled Chemical Weapons Alternatives, (PEO

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ACWA) may be submitted as a Class 1 modification not requiring prior agency approval.

[401 KAR 39:060 Section 2, 401 KAR 39:060 Section 5, 40 CFR 270.30, 40 CFR 261 Appendix I, 40 CFR 260.21, 40 CFR 270.42 Appendix I]

B.II.D.(10)(b) Required Records

The Permittee shall retain the following at the facility, or at another location as approved by the Division:

- records of all monitoring information required under the terms of this Permit, including all calibration and maintenance records
- records of all original strip chart recordings for continuous monitoring instrumentation or the modern equivalent
- copies of all reports and records required by this Permit and all data used to prepare them
- records of all data used to complete the application for this Permit
- certification required by 401 KAR 39:090 Section 1
- annual Waste Minimization Certifications
- land disposal certification
- records from all groundwater testing, for the active life of this facility, and for disposal facilities for the postclosure care period as well

[401 KAR 39:060 Section 5, 40 CFR 270.30, 40 CFR 264.73]

B.II.D.(10)(c) Record Retention

The Permittee shall retain these items for a period of at least three (3) years from the date of the sample, measurement, report, record, certification, or application, or until corrective action is completed, whichever date is later. This period may be extended by request of the Manager at any time and is automatically extended during the course of any unresolved enforcement action regarding this facility.

[401 KAR 39:060 Section 5, 40 CFR 270.30, 40 CFR 268.7]

B.II.D.(10)(d) Content of Records

Records of monitoring information shall include:

- date(s), exact place(s), time(s), and individual(s) performing sampling or measurements
- date(s) analyses were performed and the individual(s) who performed the analyses
- analytical technique(s) or method(s) used
- results of such analyses, including the detection limits or quantitation limits
- monitoring results shall be reported at intervals specified elsewhere in the permit

[401 KAR 39:060 Section 5, 40 CFR 270.30]

B.II.D.(11) Advance Sampling Notification

The Permittee shall, at a minimum, provide one (1) week advance notification to the Manager and

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the Division's Field Office, of any environmental media sampling event required by this permit or its effects, in order to determine hazardous baseline, background, or contamination levels. During an environmental emergency, the Permittee is not required to provide advance notification.

[KRS 224.46-530]

B.II.D.(12) Reporting Planned Changes

The Permittee shall give notice to the Manager as soon as possible of any planned physical alterations or additions which may impact any Hazardous Waste Management Units (HWMUs), Solid Waste Management Units (SWMUs), Areas of Concern (AOCs), or the areas contaminated by them.

[401 KAR 39:060 Section 5, 40 CFR 270.30(l)(1)]

B.II.D.(13) Reporting Noncompliance

B.II.D.(13)(a) Anticipated Noncompliance

The Permittee shall give advance notice to the Manager of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

[401 KAR 39:060 Section 5, 40 CFR 270.30(l)(2)]

B.II.D.(13)(b) Immediate Notification

The Permittee shall report to the Manager any noncompliance with the permit which may endanger human health or the environment. Any information shall be provided orally within two (2) hours from the time the Permittee becomes aware of the circumstances (Kentucky twenty-four (24) hours reporting number (800) 928-2380). This oral report shall include the following:

- Information concerning release of any hazardous waste or hazardous constituents that may cause an endangerment to public drinking water supplies, including both surface water and groundwater used for public drinking water supply
- Any information of a release or discharge of hazardous waste or hazardous waste constituents, or of a fire or explosion from a hazardous waste site or facility, which may threaten the environment or human health outside the facility

Noncompliance which requires immediate notification includes, but is not limited to:

- A determination by the Emergency Coordinator that there is an imminent or actual release, fire, or explosion which could threaten human health or the environment
- Any Environmental Release, including but not limited to, those defined by Condition B.III.A.(6).
- A confirmed exposure of an unprotected worker to GB agent.
- A failure of a permit compliance interlock to provide its protective function during processing on each respective system.

[401 KAR 39:060 Section 6, 40 CFR 270.30(l)(2), KRS 224.1-400(5)]

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B.II.D.(13)(c) Follow-up Reporting

The Permittee shall also provide a written submission to the Manager within five (5) days of the time the Permittee becomes aware of the circumstances of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the periods of noncompliance (including exact dates and times); whether the noncompliance has been corrected; if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps planned or taken to reduce, eliminate, and prevent reoccurrence of the noncompliance. The description of the occurrence and its cause shall include:

- Name, address, and telephone number of the owner or operator and the reporter
- Name, address, telephone number of the facility
- Date, time, and type of incident
- Name and quantity of material(s) involved
- The extent of injuries, if any
- An assessment of actual or potential hazard to the environment and human health outside the facility
- Estimated quantity and disposition of recovered material that resulted from the incident

[401 KAR 39:060 Section 5, 40 CFR 270.32]

B.II.D.(14) Transfer of Permit

This Permit may be transferred to a new owner or operator only if it is modified or revoked or a modification made in order to identify the new Permittee and incorporate such other requirements as may be necessary under KRS Chapter 224. Until the new owner or operator has demonstrated compliance with 401 KAR 39:060 Section 5, the old owner/operator shall continue to maintain financial assurance until released by the Manager in writing. Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner/operator in writing of the requirements of 401 KAR 39 and 401 KAR 40 (40 CFR 239-282) and this permit.

[401 KAR 39:060 Section 5, 40 CFR 270.40, 401 KAR 39:090 Section 1, 40 CFR 264.12]

B.II.D.(15) Manifest Discrepancy Report

If a significant discrepancy in a manifest is discovered, the Permittee shall attempt to reconcile the discrepancy. If not resolved within fifteen (15) days, the Permittee shall submit a letter report, including a copy of the manifest, to the Manager.

[401 KAR 39:060 Section 5, 40 CFR 270.30 (l)(7), 401 KAR 39:090 Section 1, 40 CFR 264.72(c)]

B.II.D.(16) Unmanifested Waste Report

This report shall be submitted to the Manager within fifteen (15) days of receipt of unmanifested waste.

[401 KAR 39:060 Section 5, 40 CFR 270.30 (l)(8), 401 KAR 39:090 Section 1, 40 CFR 264.76]

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B.II.D.(17) Other Noncompliance

The Permittee shall report all instances of noncompliance not reported under the other conditions of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in Permit Condition B.II.D.(13)(c).

[401 KAR 39:060 Section 5, 40 CFR 270.30]

B.II.D.(18) Other Information

Whenever the Permittee becomes aware that any relevant facts were not submitted, or were incorrect in a permit application or in any report to the Manager, the Permittee shall promptly submit such facts or information. In addition, upon request, the Permittee shall furnish to the Manager any information related to compliance with the permit.

[401 KAR 39:060 Section 5, 40 CFR 270.30 (l)(11)]

B.II.D.(19) New Additions or Alterations

The Cabinet may modify the permit when there is material and substantial alterations or additions to the permitted facility, or activity; which occurred after permit issuance and justify the application of permit conditions that are different or absent in this permit.

[401 KAR 39:060 Section 5, 40 CFR 270.41(a)(1)]

B.II.D.(20) New Information

The Cabinet may modify the permit when the Cabinet receives new information. Permits may be modified during their terms for this cause, if the information was not available at the time of permit issuance and justify the application of different permit conditions.

[401 KAR 39:060 Section 5, 40 CFR 270.41(a)(2)]

B.II.D.(21) Information Repositories

The permittee shall establish, update, and maintain information repositories. The information repositories shall contain all documents, reports, data, and information deemed necessary by the Manager to fulfill the purposes for which the repositories are established. The Manager shall have the discretion to limit the contents of the repositories.

[401 KAR 39:060 Section 5, 40 CFR 270.42 (b)(3)]

B.II.E. SIGNATORY REQUIREMENT

All applications, reports, or information submitted to the Cabinet shall be signed and certified by the Commander or by a duly authorized representative of the permittee(s). Certifications shall include the language: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the

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information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

[401 KAR 39:060 Section 5, 40 CFR 270.11 (d)(1)]

B.II.F. REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE DIVISION

All reports, notifications, or other submissions which are required by this Permit to be sent or given to the Division should be sent by certified mail, overnight mail, or hand delivered to:

Kentucky Department for Environmental Protection
Hazardous Waste Branch
300 Sower Boulevard, Second Floor
Frankfort, Kentucky 40601

B.II.G. CONFIDENTIAL INFORMATION

The Permittee may claim as confidential any information required to be submitted by this permit in accordance with 401 KAR 39:060 Section 5 and the procedures in 400 KAR 1:060.

[400 KAR 1:060 Section 1(4), 400 KAR 1:060 Section 3), 401 KAR 39:060 Section 5, 40 CFR 270.12, KRS 224.10-210, KRS 224.10-212]

B.II.H. DOCUMENTS TO BE MAINTAINED AT THE FACILITY

The Permittee shall maintain at the facility the following documents and amendments, revisions, and modifications to these documents, as required by the specified regulation:

- a. The approved Permit Application (401 KAR 39:060 Section 5)
- b. The Waste Analysis Plan (401 KAR 39:090 Section 1)
- c. Inspection schedules (401 KAR 39:090 Section 1)
- d. Personnel training documents and records (401 KAR 39:090 Section 1)
- e. The Contingency Plan (401 KAR 39:090 Section 1)
- f. The Operating Record (401 KAR 39:090 Section 1)
- g. The Closure Plan (401 KAR 39:090 Section 1)
- h. Annual Reports (401 KAR 39:090 Section 1)
- i. This permit, all permit modifications and any correspondence regarding this permit
- j. Any other document required by permit conditions

B.II.I. SCHEDULE OF COMPLIANCE

This Permit includes a specified Compliance Schedule (Appendix A) leading to compliance with regulations. Any compliance schedule items shall require compliance as soon as possible, but no later than the timeline specified in the Schedule of Compliance.

[401 KAR 39:060 Section 5, 40 CFR 270.33]

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PART III SPECIFIC CONDITIONS

B.III.A. GENERAL STANDARDS

B.III.A.(1) Permitted Waste Streams, Descriptions, and Codes

GB agent-filled munitions and resulting secondary wastes from the BGAD stockpile shall be the only wastes that are stored or treated at BGCAPP under the RD&D Permit. No off-site wastes shall be stored or treated.

The permitted hazardous waste streams generated and/or treated at the Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) Facility are listed below. Each of these hazardous wastes shall be managed as specified within this permit.

Waste Stream	Waste Codes	Waste Description
B.1	D004, D005, D006, D007, D008, D009, D010, D011, and/or N201	X03; MPT Residues & Ash
B.2	D003, D004, D005, D006, D007, D008, D009, D010, D011, and/or N501	S01, S02, and X99; Aluminum Precipitate
B.3	D004, D005, D006, D007, D008, D009, D010, D011, and/or N601	S02 and X99; Reverse Osmosis (RO) Reject
B.4	D026, D037, and/or N001	S01 and X03; Agent Contaminated Munitions Dunnage
B.5	D026 and/or D037 (m-Cresol & PCP)	S01 and X03; Munitions Dunnage
B.6	D001, D003, D008, and/or N101	S01; Rocket Motors & Shipping and Firing Tubes
B.7	D001, D002, D003, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D026, D027, D028, D029, D035, D037, D038, D039, F001-F005, P098, P106, U002, U003, U044, U080, U154, U188, U196, U213, and/or N001, N002, N003, N701	S01; Lab Wastes
B.8	D001, D002, D003, D004, D005, D006, D007, D008, D009, D010, D011, F001-F005, and/or N001, N002, N003, N101, N201, N301, N401, N501, N601, N601, N701	S01; Maintenance and Miscellaneous Wastes; Oils, Paints, Spent Solvents, Hydraulic Fluids, etc.
B.9	D022, N001	S01; Agent Derived, Listed Secondary Wastes
B.10	D001, D003, D004, D005, D006, D007, D008, D009, D010, D011, N001	S01 and X02; GB Rockets and Projectiles
B.11	D002, D004, D005, D006, D007, D008, D009, D010, D011, N301	S02; Agent Hydrolysate
B.12	D002, D003, D004, D005, D006, D007, D008, D009, D010, D011, N401	S02; Energetics Hydrolysate
B.13	D002, D003, D004, D005, D006, D007, D008, D009, D010, D011, N001, N301, N401	S02; Spent Decontamination Solution
B.14	D004, D005, D006, D007, D008, D009, D010, D011, N601	S02; SCWO Effluent
B.15	D004, D005, D006, D007, D008, D009, D010, D011, N601	S02; RO Permeate
B.16	N001	S02; OTM Condensate
B.17	N001	S02; OTE Condensate

[KRS 224.50-130, KRS 224.46-530, 401 KAR 39:060 Section 3]

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B.III.A.(2) Waste Codes

The following are listed hazardous wastes:

N001	GB (isopropyl methyl phosphonofluoridate) and related compounds (H)
N001	Maintenance/miscellaneous wastes associated with GB munitions
N001	Non-process wastes (PPE, filters, trash, concrete, rags, parts/tools, etc.) associated with GB munitions
N001	Spent carbon, pre filters, and HEPA filters associated with GB munitions
N001	Agent contaminated dunnage associated with GB munitions
N101	Uncontaminated M67 rocket motor assembly, propellant component of the rocket motors, shipping firing tubes, and end-caps associated with GB munitions
N201	Metal parts treater residue associated with GB munitions or related waste
N301	Agent hydrolysate associated with GB munitions
N401	Energetics hydrolysate associated with GB munitions
N501	Aluminum precipitate associated with GB munitions
N601	Reverse osmosis reject or supercritical water oxidation effluent associated with treated GB waste
N701	Lab wastes associated with treated GB wastes

[KRS 224.50-130, KRS 224.46-530, 401 KAR 39:060 Section 3]

B.III.A.(3) Approval Prior to Start of Agent Destruction Operations

The Permittee shall not commence operations to destroy agent-filled munitions until Kentucky Emergency Management and the Division have given written approval.

[KRS 224.46-530(1)(g), KRS 224.50-130(3)(c)]

B.III.A.(4) Environmental Releases

The Permittee shall operate the facility to prevent an environmental release of hazardous waste or hazardous waste constituents.

An environmental release shall include but is not limited to the following:

- Confirmed agent detection equal to or greater than 0.3 VSL, during the GB rocket campaign, at either of the Munitions Demilitarization Building (MDB) HVAC stacks
- Confirmed agent detection equal to or greater than 1.0 VSL, during the GB projectile campaign, at either of the Munitions Demilitarization Building (MDB) HVAC stacks
- Confirmed agent detection of agent equal to or greater than GPL at a perimeter monitoring location
- Confirmed detection of agent in a category D area that is not under engineering controls or in an airlock that is opened to the environment
- The non-transient loss of engineering controls in an MDB agent contaminated area that results in category A, category B, category A/B, or category C pressures equal to or greater than the ambient pressure in category D areas.
- A release of agent outside of engineering controls

[401 KAR 39:090 Section 6, KRS 224.1-400(1)(b), KRS 224.1-400(4), KRS 224.50-130]

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B.III.A.(5) Destruction and Removal Efficiency

B.III.A.(5)(a) Destruction and Removal Requirement

The Permittee shall assure destruction and removal efficiency (DRE) of ninety-nine and nine thousand, nine hundred, and ninety-nine ten thousandths percent (99.9999%) for the nerve agent GB. The compliance limits are upper concentrations for agent in the agent hydrolysate, energetics hydrolysate, and MDB HVAC stacks that shall not be exceeded in order to continuously meet 99.9999% DRE.

[401 KAR 39:090 Section 6, KRS 224.50-130 (3)(a)]

B.III.A.(5)(b) Hydrolysate

For GB rockets, each batch of agent hydrolysate and energetics hydrolysate shall be analyzed for agent. For GB projectiles, each batch of agent hydrolysate shall be analyzed for agent. Each batch shall contain an agent concentration at or below the compliance limit so as to ensure 99.9999% destruction and removal efficiency.

- During the GB rocket campaign, the initial compliance limit shall be 38 µg/L for agent hydrolysate and for energetics hydrolysate.
- During the GB projectile campaign, the initial compliance limit shall be 52 µg/L for agent hydrolysate.

[401 KAR 39:090 Section 6, KRS 224.50-130 (3)(a)]

B.III.A.(5)(c) MDB HVAC Stacks

When agent is present in the Munitions Demilitarization Building (MDB), the MDB HVAC stack(s) shall be monitored for agent and shall contain an agent concentration at or below the compliance limit so as to ensure 99.9999% destruction and removal efficiency.

- During the GB rocket campaign, the MDB stack initial compliance limit shall be 0.3 VSL.
- During the GB projectile campaign, the MDB stack initial compliance limit shall be 1.0 VSL.

[401 KAR 39:090 Section 6, KRS 224.50-130 (3)(a)]

B.III.A.(5)(d) Repeat Destruction and Removal Demonstration

The Permittee shall repeat the demonstration of 99.9999% destruction and removal efficiency if the neutralization formula changes, or if any destruction process changes, or upon written request by the Hazardous Waste Branch Manager.

[KRS 224.46-530(1)(g), KRS 224.50-130(3)(a), 401 KAR 39:090 Section 6]

B.III.A.(6) Off-gas Treatment System

B.III.A.(6)(a) Pilot Demonstration Testing

During the pilot demonstration testing, Permittee shall demonstrate that under normal operating

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conditions and normal agent loading that the agent concentration in the OTM off-gases is less than 1.0 VSL. Until the Permittee has demonstrated that the OTM off-gases contain less than 1.0 VSL of agent, OTM Condensate shall be tested for agent and cleared to less than 38 µg/L prior to being released from the MDB.

[KRS 224.46-530(1)(g), KRS 224.50-130]

B.III.A.(6)(b) OTM Condensate - Normal Operation

OTM condensate shall be treated in the SCWO or it shall be cleared to less than 38 µg/L prior to shipment offsite.

[KRS 224.46-530(1)(g), KRS 224.50-130]

B.III.A.(6)(c) TOX Shutdown

During TOX unit shutdown or off-normal conditions OTM condensate shall be directed to the SDS tanks. Agent waste feed shall be prohibited to the Agent Neutralization System (ANS) and the Metal Parts Treater (MPT).

[KRS 224.46-530(1)(g), KRS 224.50-130]

B.III.A.(7) MDB HVAC System

B.III.A.(7)(a) Cascade Pressure Control

The Munitions Demilitarization Building (MDB) HVAC system shall maintain “cascade pressure control” and shall:

- Maintain a negative pressure environment in Hazard Category A, Hazard Category B, and Hazard Category C areas of the MDB
- Maintain the flow of air from areas of low contamination probability to areas of higher contamination probability.
- Remove agent in the air flow from the MDB and its systems prior to discharge to the atmosphere after the air streams have passed through other air pollution control systems, including the off-gas treatment for the MPT (OTM) and the EBH (OTE) to ensure 99.9999% destruction and removal efficiency, as specified in Condition B.III.A.(7)(c).

[KRS 224.46-530(1)(g), KRS 224.50-130]

B.III.A.(7)(b) Operational Requirement

The MDB HVAC System shall be operating at all times when agent is present in the MDB. Waste feed to all MDB treatment units shall be stopped if the MDB HVAC does not meet the conditions of this section.

[KRS 224.46-530(1)(g), KRS 224.50-130(3)]

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B.III.A.(7)(c) Agent Breakthrough

Any confirmed detection of agent between beds of carbon will indicate agent breakthrough. If breakthrough is detected at the last mid-bed monitoring location, between beds 4 and 5, the carbon filter unit shall be taken offline and carbon beds shall be replaced prior to the unit being placed back online.

[KRS 224.46-530(1)(g), KRS 224.50-130(3)]

B.III.A.(8) Pilot Test Demonstration Plan

B.III.A.(8)(a) The Permittee shall submit to the Division a Pilot Test Demonstration Plan (PTDP) as required by the Schedule of Compliance, Appendix A. The Permittee shall not start agent treatment or processing before the Division has approved the PTDP. The PTDP shall:

- Confirm that all performance standards are met using limiting conditions of operations, interlocks, treatment quantities, and waste feed rates as specified in the PTDP or the RCRA Operations Plan.
- Test each permit compliance interlock, except agent emission interlocks, at the condition specified or at a more limiting condition. If a condition is tested and validated at a less limiting value, the interlock value shall be revised.

B.III.A.(8)(b) The Permittee shall measure stack emissions for all Constituents of Potential Concern (COPCs) identified in the Multi-Pathway Human Health Risk Assessment (MPHHRA) (included as Attachment M). All measurements shall be included in the Pilot Test Demonstration Reports (PTDR). The Permittee shall revise the MPHHRA if the measured emission rates exceed estimated emission rates used in the model or if other hazardous constituents are detected. The revised MPHHRA shall be submitted to the Manager for approval.

B.III.A.(8)(c) During pilot demonstration testing, the Permittee shall operate and monitor emissions as specified in the approved PTDP.

[KRS 224.50-130(3), 401 KAR 39:090 Section 1, 40 CFR 270.23(c)]

B.III.A.(9) Sumps and Secondary Containment

Sumps and secondary containment shall prevent any migration of wastes or accumulated liquid outside of secondary containment at any time during the use of the hazardous waste management unit.

- Spilled or leaked waste and accumulated precipitation shall be removed from the sump or collection area in as timely a manner as is necessary to prevent overflow of the collection system.
- The coatings system providing secondary containment in the MDB and SPB shall be:
 - Free of cracks and gaps
 - Adhered to the structure beneath the coating
 - Free of liquid beneath the coating
 - Inspected in accordance with the Inspection Plan required by the Schedule of Compliance, Appendix A

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- Sumps and containment areas where coating repair is taking place shall be isolated or removed from service of providing secondary containment. The Permittee shall document repairs to coatings.
- The Permittee shall document areas that have been exposed to agent and clean-up activities.

[401 KAR 39:090 Section 1, 40 CFR 264.175, 40 CFR 264.193]

B.III.A.(10) Spent Decontamination Solution

Contents of the spent decontamination collection system shall be treated in an ANR or tested for agent and cleared to less than 38 µg/L prior to being released from the MDB. Spent decontamination solution shall not be sent off-site for treatment and/or disposal unless analyzed for agent and cleared to less than 38 µg/L.

[KRS 224.46-530(1)(g), KRS 224.50-130(3)]

B.III.A.(11) SCWO Effluent

During the Pilot Demonstration Testing, SCWO effluent shall be tested for agent and the quantitative results shall be provided to the Hazardous Waste Branch Manager. SCWO effluent shall be tested for total organic carbon and cleared to 50 ppm prior to SCWO effluent or RO reject being shipped off-site.

[KRS 224.46-530(1)(g), KRS 224.50-130(3)]

B.III.A.(12) Leaker Munitions

Known leaker munitions are rockets or projectiles that have been discovered to leak agent vapor or liquid while stored in the CLA. They will have been over-packed prior to being transferred to BGCAPP.

Unknown leaker munitions are rockets or projectiles that have been discovered to leak agent vapor or liquid during transport or after being transferred to BGCAPP. Unknown leakers shall be over-packed and placed under engineering controls to prevent leaks to the environment.

The permittee shall give advance notice to the Manager before beginning treatment of leaker munitions.

[KRS 224.46-530(1)(g), KRS 224.50-130(3)]

B.III.A.(13) Worker Protection

All workers within 1,000 meters of the MDB shall be provided with an adequate level of protection against exposure to nerve agents.

[KRS 224.50-130(3), 401 KAR 39:090 Section 6]

B.III.A.(14) Reporting Requirements for Research, Development and Demonstration Permit

The Permittee shall submit quarterly reports to the Hazardous Waste Branch, no later than 30 days after the end of each calendar quarter, that document the treatment activities for that calendar quarter. The report shall include:

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- Type and number of munitions processed
- Quantity of agent processed
- Quantity of agent hydrolysate generated
- Documentation for each batch of agent hydrolysate that was rejected
- Quantity of energetics hydrolysate generated
- Documentation for each batch of energetics hydrolysate that was rejected
- Date, time and concentration of any confirmed agent detection at the MDB stack
- Quantity of agent hydrolysate processed by SCWO
- Quantity of energetics hydrolysate processed by SCWO
- Documentation for any off spec SCWO effluent
- Type and quantity of wastes shipped to TSD facilities
- Details of off normal conditions experienced and corrective measures taken

[KRS 224.50-130(3), KRS 224.46-530(1)(g), 401 KAR 39:060 Section 5, 40 CFR 270.65(a)(3)]

B.III.A.(15) Limitations of Research, Development and Demonstration Permit

This Research, Development and Demonstration Permit is intended for storage and treatment of munitions containing the nerve agent GB. Agent hydrolysate and energetics hydrolysate shall be treated by supercritical water oxidation. Treatment of other chemical agents or shipping of GB hydrolysate off site is not permitted.

[KRS 224.50-130(3), 401 KAR 39:060 Section 5, 40 CFR 270.65]

B.III.B. GENERAL FACILITY STANDARDS

B.III.B.(1) Identification Number

KY8-213-820-105

B.III.B.(2) Required Notices

The Permittee shall not receive hazardous waste from off-site sources.

B.III.B.(3) Waste Analysis

B.III.B.(3)(a) Detailed Chemical and Physical Analysis

Before the Permittee stores or disposes of any hazardous waste, the Permittee shall obtain a detailed chemical and physical analysis of a representative sample of the waste in accordance with Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, EPA Publication SW-846, or equivalent methods approved by the Manager. At a minimum, this analysis shall contain all the information which will need to be known to treat, store, or dispose of the waste. The analysis may be based in whole or in part on:

- Testing the waste according to the methods set forth in 401 KAR 39:060 Section 3 (Identification and Listing of Hazardous Waste), 40 CFR 261 Subpart C, or an equivalent method approved by the Cabinet; or

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- Applying generator knowledge of the waste based on existing published or documented data on the hazardous waste or on hazardous waste generated from a similar process.

[401 KAR 39:060 Section 3, 40 CFR 261 Subpart C, 401 KAR 39:090 Section 1, 40 CFR 264.13]

B.III.B.(3)(b) Analysis Repeated As Necessary

The analysis shall be repeated as necessary to ensure that it is accurate and up to date. A review of the waste streams shall be conducted annually to determine if any changes have occurred that may require an analysis to be repeated. At a minimum, the analysis shall be repeated:

- When the Permittee is notified, or has reason to believe, that the process or operation generating the hazardous waste has changed; and/or
- If the owner or operator of an off-site facility that received hazardous waste from the Permittee determines that the waste does not match the waste specified on the accompanying shipping manifest.

[401 KAR 39:090 Section 1, 40 CFR 264.13 (a)(3)]

B.III.B.(3)(c) Comply With Waste Analysis Plan

The Permittee shall comply with the Waste Analysis Plan, Attachment C, of the permit application. At a minimum, the Permittee shall maintain properly functioning instruments, use approved sampling and analytical methods, verify the validity of sampling and analytical procedures, and perform correct laboratory calculations. If the Permittee uses a contract laboratory to perform analyses, then the Permittee shall inform the laboratory, in writing, that it shall operate under the waste analysis conditions set forth in this Permit.

[401 KAR 39:090 Section 1, 40 CFR 264.13]

B.III.B.(4) Security

The Permittee shall comply with the security procedures outlined in the Procedures to Prevent Hazards, Attachment F, of the applicable Section of this permit. The Permittee shall maintain security at the facility during the postclosure care period, in accordance with the Closure Plan, Part I, of the permit application.

[401 KAR 39:090 Section 1, 40 CFR 264.14]

B.III.B.(4)(a) Prevent Entry

The Permittee shall prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons onto the active portion of the facility.

[401 KAR 39:090 Section 1, 40 CFR 264.14]

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B.III.B.(4)(b) Perimeter Fence

The Permittee shall have:

- A twenty-four (24) hour surveillance system (for example, television monitoring or surveillance by guards or facility personnel) which continuously monitors and controls entry onto the active portion of the facility
- An artificial barrier (fence in good repair), that completely surrounds the active portion of the facility
- A means to control entry, at all times, through the gates or other entrances to the active portion of the facility (an attendant, television monitors, locked entrance, or controlled roadway access to the facility)

[401 KAR 39:090 Section 1, 40 CFR 264.14]

B.III.B.(4)(c) Warning Signs

The Permittee shall have:

- A sign with the legend, "Danger - Unauthorized Personnel Keep Out," posted at each entrance to the active portion of a facility, and at other locations, in sufficient number to be seen from any approach to this active portion. The legend shall be written in English and in any other language predominant in the area surrounding the facility and shall be legible from a distance of at least twenty-five (25) feet.
- Existing signs with a legend other than "Danger - Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion, and that entry onto the active portion can be dangerous.

[401 KAR 39:090 Section 1, 40 CFR 264.14]

B.III.B.(5) General Inspection Requirements

The Permittee shall inspect his facility for malfunctions and deterioration, operator errors, and discharge which may cause or lead to a release of hazardous waste constituents to the environment or a threat to human health. These inspections shall occur often enough to identify problems in time to correct them before they harm human health or the environment. The Permittee shall remedy any deterioration(s) or malfunction(s) discovered by an inspection, and keep all records.

[401 KAR 39:090 Section 1, 40 CFR 264.15 (except 40 CFR 264.15(b)(5))]

B.III.B.(5)(a) Inspection Schedule

The Permittee shall follow the schedule in Procedures to Prevent Hazards, Attachment F, the permit application, for inspecting monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment that are important to preventing, detecting, or responding to environmental or human health hazards.

The Permittee shall keep this schedule at the facility, and it shall identify the types of problems (for example, malfunctions or deterioration) which are to be looked for during the inspection (for example, inoperative sump pump, leaking container, or eroding dike).

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The frequency of inspection shall be based on the rate of deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or any operator error goes undetected between inspections. At a minimum, the inspection frequency for all hazardous waste storage units shall be weekly.

[401 KAR 39:090 Section 1, 40 CFR 264.15 (b)(except 40 CFR 264.15(b)(5))]

B.III.B.(5)(b) Remedy

The Permittee shall remedy any deterioration or malfunction of equipment or structures which the inspection reveals, on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action shall be taken immediately.

[401 KAR 39:090 Section 1, 40 CFR 264.15 (c)]

B.III.B.(5)(c) General Inspection Log

The Permittee shall record inspections in an inspection log or summary. These records shall be kept for at least three (3) years from the date of inspection. At a minimum, these records shall include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

[401 KAR 39:090 Section 1, 40 CFR 264.15 (d)]

B.III.B.(6) Personnel Training

The Permittee shall comply with the Personnel Training Plan, Attachment H, of the permit application. Facility personnel shall successfully complete a program of classroom instruction and on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with this permit. The Permittee shall ensure that this program includes all the elements described below in this condition. This program shall be directed by a person trained in hazardous waste management procedures, and shall include instruction which teaches facility personnel hazardous waste management procedures (including Contingency Plan implementation) relevant to the position(s) in which they are employed. At a minimum, the training program shall be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including where applicable:

- Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment
- Communications or alarm systems
- Response to fires or explosions
- Response to groundwater contamination incidents
- Shutdown of operations

[401 KAR 39:090 Section 1, 40 CFR 264.16]

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B.III.B.(6)(a) Initial Training

Facility personnel shall successfully complete the training programs in accordance with the Personnel Training Plan, Attachment H, of the permit application, within six (6) months after the date of their employment or assignment to this facility, or to a new position at this facility, whichever is later. Employees shall not work in unsupervised positions until they have completed training.

[401 KAR 39:090 Section 1, 40 CFR 264.16]

B.III.B.(6)(b) Annual Training

Facility personnel shall be given an appropriate annual review of the initial training in accordance with the Personnel Training Plan, Attachment H, of the permit application.

[401 KAR 39:090 Section 1, 40 CFR 264.16]

B.III.B.(6)(c) Job Description and Training

The Permittee shall maintain the following training documents and records at the facility:

- The job title for each position at the facility related to hazardous waste management, and the names of the employees filling each job
- A written job description for each job title, including the required skills, education, qualifications, and duties of employees assigned to each position
- A written description of the type and amount of both introductory and continuing training that will be given to each job title
- Records that document that the training or job experience has been given to, and completed by, facility personnel

[401 KAR 39:090 Section 1, 40 CFR 264.16]

B.III.B.(6)(d) Training Records

Training records on current personnel shall be kept until closure of the facility. Training records on former employees shall be kept for at least three (3) years from the date the employee last worked at the facility.

[401 KAR 39:090 Section 1, 40 CFR 264.16]

B.III.B.(7) General Requirements for Ignitable, Reactive, or Incompatible Waste

B.III.B.(7)(a) The Permittee shall take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste shall be separated and protected from sources of ignition or reaction including but not limited to: open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (for example, from heat-producing chemical reactions), and radiant heat.

B.III.B.(7)(b) The Permittee shall take precautions to prevent uncontrolled reactions which generate

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extreme heat or pressure, fire or explosions, or violent reactions; produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment; produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosion; damage the structural integrity of the device or facility; or through other like means threaten human health or the environment.

B.III.B.(7)(c) The Permittee shall document compliance with this condition. This documentation may be based on references to published scientific or engineering literature, data from trial tests (for example, bench scale or pilot scale tests), waste analyses, or the results of the treatment of similar wastes by similar treatment processes and under similar conditions.

[401 KAR 39:090 Section 1, 40 CFR 264.17]

B.III.B.(8) Location Standards

Not applicable

B.III.B.(9) Land Disposal Restrictions (LDR)

A waste, restricted by LDR, as identified in 401 KAR 39:060 Section 4, may not be placed in a land disposal unit without further treatment unless the requirements of 401 KAR 39:060 Section 4 are met.

[401 KAR 39:060 Section 4, 40 CFR 268 Subpart C]

B.III.B.(9)(a) LDR - Prohibitions on Storage of Restricted Waste

The storage of hazardous wastes restricted from land disposal under 401 KAR 39:060 Section 4 is prohibited, unless the following conditions are met:

- The Permittee stores such waste on site solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal.
- Each container of Hazardous Waste is clearly labeled with the words "Hazardous Waste," and marked to identify its contents and the date accumulation began in that container.

[401 KAR 39:060 Section 4, 40 CFR 268.50, KRS 224.46-520]

B.III.B.(9)(b) LDR - Storage Time

Munitions storage: The Permittee may store waste restricted from land disposal for up to one (1) year in a permitted hazardous waste storage unit. The Permittee may store waste restricted from land disposal beyond one (1) year, if such storage was solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

[401 KAR 39:060 Section 4, 40 CFR 268.50, KRS 224.46-520]

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B.III.B.(9)(c) LDR - General Restrictions

401 KAR 39:060 Section 4 identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances in which an otherwise prohibited waste may continue to be placed on or in a land treatment, storage, or disposal unit. The Permittee shall maintain compliance with the requirements of 401 KAR 39:060 Section 4. Where the Permittee has applied for an extension, waiver, or variance under 401 KAR 39:060 Section 4, the Permittee shall comply with all restrictions on land disposal under this part once the effective date for the waste has been reached pending final approval of such application.

[401 KAR 39:060 Section 4, 40 CFR 268 Subpart C, KRS 224.46-520]

B.III.B.(9)(d) Restrict Shipment

The Permittee shall determine if any hazardous waste generated needs to be treated before it can be land disposed. The Permittee shall provide certification with each hazardous waste shipment that the waste meets land disposal requirements or a written notice that the waste does not meet the treatment standard.

Chemical related hazardous waste shipped off-site for treatment or disposal shall comply with the Waste Analysis Plan, Attachment C of the permit application.

Off-site shipments of secondary waste with headspace monitoring resulting in greater than 1 Vapor Screening Level (VSL), shall be disposed of at an appropriately permitted TSDF with direct feed to the receiving facility's treatment unit.

[401 KAR 39:060 Section 4, 40 CFR 268 Subpart C, KRS 224.46-530, KRS 224.50-130]

B.III.C. PREPAREDNESS AND PREVENTION

B.III.C.(1) Design and Operation of Facility

The Permittee shall construct, maintain, and operate the facility in a manner to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

The Permittee shall construct all hazardous waste management units (HWMUs) in accordance with the approved Permit Application and the drawings incorporated into the application.

[401 KAR 39:090 Section 1, 40 CFR 264.31]

B.III.C.(2) Required Equipment

The Permittee shall keep the following equipment at the facility as specified in the Contingency Plan, Attachment G, including:

- An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel

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- A device, such as a telephone (immediately available at the scene of operations) or a hand-held two (2) way radio, capable of summoning emergency assistance from BGAD security force, BGAD fire department, emergency operations center (EOC), or state/local emergency response teams
- Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment
- Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or water spray systems
- Monitoring equipment, personal protective equipment, decontamination solution
- Munitions over-packs to contain leaking munitions

[401 KAR 39:090 Section 1, 40 CFR 264.32, KRS 224.46-530]

B.III.C.(3) Testing and Maintenance of Equipment

The Permittee shall:

- Test all emergency equipment including; communication, alarm, fire, spill control, and decontamination equipment at the facility for quality
- Maintain all equipment at the facility in good working order, to ensure proper operation in time of emergency, consistent with the inspection schedule given in the Procedures to Prevent Hazards, Attachment F

[401 KAR 39:090 Section 1, 40 CFR 264.33]

B.III.C.(4) Access to Communications or Alarm Systems

Whenever hazardous waste is present in the BGCAPP Facility, all personnel shall have immediate access to a telephone or a hand-held two (2) way radio, capable of summoning emergency assistance, either directly or through visual or voice contact with another employee.

[401 KAR 39:090 Section 1, 40 CFR 264.34]

B.III.C.(5) Required Aisle Space

The Permittee shall maintain adequate aisle space in the container storage areas to allow unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area.

[401 KAR 39:090 Section 1, 40 CFR 264.35]

B.III.C.(6) Arrangements with Local Authorities

The Permittee shall attempt to make the following arrangements, as appropriate for the type of waste handled at this facility and the potential need for the services of these organizations:

- Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties, and associated hazards of hazardous waste handled

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at the facility and places where facility personnel would normally be working, entrances to any roads inside the facility, and possible evacuation routes

- Where more than one (1) police or fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority
- Agreements with state emergency response teams, emergency response contractors, and equipment suppliers
- Arrangements to familiarize local hospitals with the properties of the hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility
- Where state or local authorities decline to enter into such arrangements, the Permittee shall document the refusal in the Operating Record

The Permittee shall keep current copies of all Agreements with Local Authorities for hazardous waste emergency response assistance at an on-site location. If, at any time, the Permittee enters into an agreement with an off-post responder not listed in the Contingency Plan or chooses not to renew an agreement with an off-post responder listed in the Contingency Plan, then the Permittee shall notify the Manager.

[401 KAR 39:090 Section 1, 40 CFR 264.37]

B.III.D. CONTINGENCY PLAN AND EMERGENCY PROCEDURES

B.III.D.(1) Implementation of Plan

The Permittee shall comply with the Contingency Plan and Emergency Procedures, Attachment G, of the permit application and shall immediately carry out the procedures in the Contingency Plan whenever there is an imminent or actual emergency situation including a fire, explosion, or unplanned sudden or non sudden release of any hazardous waste or hazardous waste constituents which could threaten human health or the environment, including: activate internal facility alarms or communication systems, where applicable, to notify all facility personnel and appropriate state or local agencies with designated response roles if their help is needed.

[401 KAR 39:090 Section 1, 40 CFR 264.51, 40 CFR 264.56]

B.III.D.(2) Content of Plan

The Contingency Plan shall contain the following information and be kept up to date:

- Actions facility personnel shall take in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility
- Arrangements agreed to by local emergency services
- List of Emergency Coordinators
- List, description, and location of all emergency equipment
- Evacuation plan for facility personnel that describes signals, routes, and alternate routes

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[401 KAR 39:090 Section 1, 40 CFR 264.52]

B.III.D.(3) Copies of Plan

A copy of the Contingency Plan and all revisions to the plan shall be:

- Maintained at the BGCAPP Control Room
- Provided to BGAD Emergency Operations Center (EOC), all local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services
- Provided to all outside agencies, contractors, and emergency response providers that have a Memorandum of Agreement (MOA) with the facility to provide assistance in an emergency
- Provided to the Hazardous Waste Branch Manager and the Field Operations Branch Manager

[401 KAR 39:090 Section 1, 40 CFR 264.53]

B.III.D.(4) Amendment of Plan

The Contingency Plan shall be reviewed, and immediately amended, if necessary, whenever:

- The facility permit is revised
- The plan fails in an emergency
- The facility changes (e.g., in its design, construction, operation, maintenance, or other circumstances) in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency
- There is a change to the list of Emergency Coordinators
- The list of emergency equipment changes
- Administrative updates and/or changes as identified above to the Contingency Plan may not warrant a permit modification. These shall be submitted to the Manager for determination in accordance with 401 KAR 39:060 Section 5.

[401 KAR 39:090 Section 1, 40 CFR 264.54, 401 KAR 39:060 Section 5, 40 CFR 270.42]

B.III.D.(5) Emergency Coordinator (EC)

At all times, there shall be an EC either at the facility or on call with the responsibility for coordinating all emergency response measures. The EC shall be thoroughly familiar with all aspects of the facility's Contingency Plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. The EC shall have the authority to commit the resources needed to carry out the Contingency Plan.

[401 KAR 39:090 Section 1, 40 CFR 264.55]

B.III.D.(6) Emergency Procedures

B.III.D.(6)(a) Activate Alarms

Whenever there is an imminent or actual emergency situation, the EC (or designee) shall

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immediately activate internal facility alarms or communication systems, where applicable, to notify all facility personnel, and notify appropriate state and local agencies with designated response roles, as specified in the Contingency Plan.

[401 KAR 39:090 Section 1, 40 CFR 264.56]

B.III.D.(6)(b) Evaluate Scope of Release

Whenever there is a release, fire, or explosion, the EC shall immediately identify the character, exact source, amount, and areal extent of any released materials. This evaluation may be completed by observation or review of facility records or manifests, and, if necessary, by chemical analysis.

[401 KAR 39:090 Section 1, 40 CFR 264.56]

B.III.D.(6)(c) Assess Possible Hazards to Human Health or the Environment

The EC shall assess possible hazards to human health or the environment that may result from a release, fire, or explosion. This assessment shall consider both direct and indirect effects of the release, fire, or explosion (for example, the effects of any toxic irritating or asphyxiating gases that are generated or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions).

[401 KAR 39:090 Section 1, 40 CFR 264.56]

B.III.D.(6)(d) Hazard to Human Health or the Environment Outside of the Facility

If the EC determines that the facility has had a release, fire, or explosion which could threaten human health, or the environment, outside the facility, the findings shall be reported as follows:

- If the assessment indicates that evacuation of local areas may be advisable, appropriate local authorities shall be notified immediately. The EC shall be available to help appropriate officials decide whether local areas should be evacuated
- The EC shall immediately notify either the government official designated as the on-scene coordinator for that geographical area, or the National Response Center (using their 24-hour toll free number 800-424-8802). The report shall include:
 - Name and telephone number of reporter
 - Name and address of facility
 - Time and type of incident
 - Name and quantity of material(s) involved, to the extent known
 - The extent of injuries, if any
 - The possible hazards to human health or the environment

[401 KAR 39:090 Section 1, 40 CFR 264.56]

B.III.D.(6)(e) Preventive Measures

During an emergency, the EC shall take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility.

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These measures shall include, where applicable, stopping processes and operations, collecting and containing release waste, and removing or isolating containers.

[401 KAR 39:090 Section 1, 40 CFR 264.56]

B.III.D.(6)(f) Monitoring During Halted Operations

If the facility stops operations in response to a fire, explosion, or confirmed release, the EC shall ensure monitoring occurs for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

[401 KAR 39:090 Section 1, 40 CFR 264.56]

B.III.D.(6)(g) Secure Recovered Waste

Immediately after an emergency, the EC shall provide for treating, storing, or disposing of recovered waste, contaminated soil, surface water or ground water, or other materials that result from a release, fire, or explosion at the facility.

[401 KAR 39:090 Section 1, 40 CFR 264.56]

B.III.D.(6)(h) Recovery After Emergency

The EC shall ensure that, in the affected area(s) of the facility:

- No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed
- All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed

[401 KAR 39:090 Section 1, 40 CFR 264.56]

B.III.D.(6)(i) Environmental Emergency Written Report

The Permittee shall note in the Operating Record the time, date, and details of any release of hazardous waste at or above the Reportable Quantity (RQ). Within fifteen (15) days of the later of the time of release at or above the RQ, the conclusion of emergency operations, or completion of efforts to control or mitigate the release or threatened release, the Permittee shall submit a written report on the incident to the Manager and the Division Field Office. The report shall include:

- Name, address, and telephone number of the Permittee
- Name, address, and telephone number of the facility
- Name, address, and telephone number of persons having actual knowledge of the facts surrounding the release or threatened release
- Date, time, and type of incident (e.g., fire, explosion)
- Name, quantity, concentration of materials, pollutant, or contaminant involved
- Precise location, circumstances, and cause
- Extent of injuries, if any
- Assessment of actual or potential hazards to human health or the environment, and daily

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efforts taken by the Permittee to control or mitigate, including monitoring data

- Estimated quantity and disposition of recovered material that resulted from the incident
- Changes in equipment, procedures, personnel, etc. to prevent similar incidents
- Any other pertinent or requested information

[401 KAR 39:090 Section 1, 40 CFR 264.56, KRS 224.1-400]

B.III.D.(6)(j) Daily Notification During Environmental Emergency

The Permittee shall notify the Division's Field Office and Hazardous Waste Branch daily during an environmental emergency operation by telephone, e-mail, or fax. The following information, at a minimum, shall be provided:

- Summary of the previous day's operations
- Summary of planned operations for the day, including monitoring and movement/handling
- Results of any monitoring since the last daily notification
- Any other pertinent or requested information

[401 KAR 39:060 Section 5, 40 CFR 270.32, KRS 224.46-530]

B.III.D.(6)(k) Memorandums of Agreements (MOAs)

The Permittee shall keep current copies of all Memorandums of Agreement (MOAs) with off-post responders at an on-site location. If, at any time, the Permittee enters into an agreement with an off-post responder not listed in the Contingency Plan and Emergency Procedures, Attachment G, of the permit application, or chooses not to renew an agreement with an off-post responder listed in the Contingency Plan, then the Permittee shall notify the Manager.

[401 KAR 39:090 Section 1, 40 CFR 264.52]

B.III.E. MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING

B.III.E.(1) Use of the Manifest System

B.III.E.(1)(a) Receive No Chemical Related Hazardous Waste

The Permittee shall not accept at this facility any chemical munitions or Chemical Related Hazardous Waste generated off site.

[401 KAR 39:060 Section 5, 40 CFR 270.32, KRS 224.46-530]

B.III.E.(1)(b) General Requirements

If the Permittee transports, or offers for transportation, hazardous waste for off-site treatment, storage, or disposal, the Permittee shall prepare a manifest. The Permittee shall designate on the manifest, the facility which is permitted to handle the waste described on the manifest. The Permittee may also designate on the manifest, one (1) alternate facility which is permitted to handle the waste in the event an emergency prevents delivery of the waste to the primary

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facility. If the transporter is unable to deliver the hazardous waste to the primary facility or the alternate facility, the Permittee shall either designate another facility or instruct the transporter to return the waste.

[401 KAR 39:080 Section 1, 40 CFR 262.20, Appendix to 40 CFR Part 262]

B.III.E.(1)(c) Acquisition of Manifests

If the state to which the shipment is manifested (consignment state) supplies the manifest and requires its use, then the Permittee shall use that manifest and include all information required. If the consignment state does not require and supply the manifest, then the Permittee shall use the Commonwealth of Kentucky's manifest and include all information required.

[401 KAR 39:080 Section 1, 40 CFR 262.21, Appendix to 40 CFR Part 262]

B.III.E.(1)(d) Manifest Number of Copies

The manifest consists of at least the number of copies which will provide the Permittee, each transporter, and the owner or operator of the designated facility with one (1) copy each for their records and another copy to be returned, by the operator of the designated facility, to the Permittee.

[401 KAR 39:080 Section 1, 40 CFR 262.22]

B.III.E.(1)(e) Use of the Manifest When Shipping

The Permittee shall:

- Sign the manifest certification by hand
- Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest
- Retain one (1) copy for a minimum of three years
- The Permittee shall give the transporter the remaining copies of the manifest
- For rail shipments of hazardous waste within the United States which originate at the facility, the Permittee shall send at least three (3) copies of the manifest dated and signed in accordance with this section to the next non-rail transporter, if any; or the designated facility if transported solely by rail; or the last rail transporter to handle the waste in the United States, if exported by rail.
- For shipments of hazardous waste to a designated facility in a state which has not yet obtained authorization to regulate that particular waste as hazardous, the Permittee shall assure that the designated facility agrees to sign and return the manifest to the Permittee, and that any out-of-state transporter signs and forwards the manifest to the designated facility with the shipment.

[401 KAR 39:080 Section 1, 40 CFR 262.23]

B.III.E.(1)(f) Use of Manifest System When Receiving

Not applicable

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B.III.E.(1)(g) Receiving Hazardous Waste by Rail

Not applicable

B.III.E.(2) Manifest Discrepancies

Manifest discrepancies are differences between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity or type of hazardous waste a facility actually receives. Significant discrepancies in quantity are:

- For bulk waste, variations greater than ten (10) percent in weight
- For batch waste, any variation in piece count, such as a discrepancy of one (1) drum in a truckload

Significant discrepancies in type are obvious differences which can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper.

Upon discovering a significant discrepancy, the Permittee shall attempt to reconcile the discrepancy with the waste generator or transporter (for example, by telephone or email). If the discrepancy is not resolved within fifteen (15) days after receiving the waste, the Permittee shall immediately submit to the Manager a letter describing the discrepancy, a description of all attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

[401 KAR 39:090 Section 1, 40 CFR 264.72]

B.III.E.(3) Operating Record

The Permittee shall keep a written Operating Record. At a minimum, the following information shall be recorded, as it becomes available, and maintained in the Operating Record until closure of the facility:

- a. A description and the quantity of each hazardous waste received, and the method and date of its treatment, storage, or disposal at the facility as described in 401 KAR 39:090 Section 1 (Appendix I to 40 CFR 264 on Recordkeeping Instructions)
- b. The location of each hazardous waste within the facility and the quantity at each location
- c. Records and results of waste analyses and waste determinations
- d. Summary reports and details of all incidents that require implementing Contingency Plans
- e. Records and results of facility and equipment inspections for three (3) years
- f. Monitoring, testing, analytical data, and corrective action
- g. Notice to off-site generator of hazardous waste informing them in writing that the Permittee has the appropriate permit(s) for, and shall accept, the waste the generator is shipping
- h. For an off-site treatment facility, a copy of the notice, and the certification and demonstration, if applicable, required of a generator under 401 KAR 39:060 Section 4 (Land Disposal Restrictions)
- i. For an on-site treatment facility, the information contained in the notice (except the manifest number), and the certification and demonstration if applicable, required of the generator under 401 KAR 39:060 Section 4 (Land Disposal Restrictions, 40 CFR 268.7 and 268.9)
- j. Records of munitions processed
- k. Records of all operating/processing hours and days

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- l. Copies of all documents showing the quantity and disposition of metal scrap and residues shipped with the bill of lading or manifest number (if applicable)
- m. Records associated with off-site shipments of hazardous wastes generated at the facility, the types and locations of destination facilities, and how the wastes were managed at the destination facilities (for example: recycling, treatment, storage, or disposal)
- n. Records of quantities and date of each shipment of hazardous waste placed in a land disposal unit pursuant to 401 KAR 39:090 Section 1, 40 CFR 264.73
- o. The Permittee shall also ensure that the facility that receives, treats, and/or disposes of hazardous waste generated at the permitted facility has the appropriate permits to treat and/or dispose of the waste. The Permittee shall retain documentation of treatment from the treatment or disposal facility
- p. The date and time of all permit compliance interlock activations to include the cause, corrective action, and corrective measures taken to prevent recurrence of the incident.
- q. The Permittee shall record all incidents of the interlock function failures including the corrective measures taken to correct the condition that caused the failure and all equipment monitoring and inspection records for monitoring equipment compiled under the conditions of this permit
- r. Daily Limiting Conditions of Operations checklist and any necessary mitigation measures
- s. Any agent leak prior to treatment shall be documented and steps taken in response to the leak shall be documented each day until agent is no longer detected

[401 KAR 39:060 Section 3, 40 CFR 261, 401 KAR 39:090 Section 1, 40 CFR 264.10 – 264.19, 40 CFR 264.56, 40 CFR 264.73, 40 CFR 264 Appendix I, 401 KAR 39:060 Section 4, 40 CFR 268.7, KRS 224.50-130(5)]

B.III.E.(4) Availability, Retention, and Disposition of Records

All records, including plans, shall be furnished upon request, and made available at all reasonable times for inspection by any officer, employee, or representative of the Cabinet who is duly designated by the Secretary of the Cabinet. The retention period for all records required under this condition is extended automatically during the course of any unresolved enforcement action regarding the facility or as requested by the Cabinet. A copy of records of waste disposal locations and quantities shall be sent to the Cabinet and local land authority upon closure of the facility.

The Permittee shall:

- Keep a copy of each signed shipping manifest, in addition to the signed copy returned from the designated facility which received the waste. Both copies shall be retained on record for at least three (3) years from the date the waste was accepted by the initial transporter.
- Keep a copy of each Annual Report and exception report for a period of at least three (3) years from the due date of the report (March 1)
- Keep records of any test results, waste analyses, or other waste determinations for at least three (3) years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal
- Keep a log showing all facility and equipment inspections

[401 KAR 39:090 Section 1, 40 CFR 264.74]

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B.III.E.(5) Annual Report

The Permittee shall prepare and submit a Hazardous Waste Annual Report, DEP Form 7072. The Hazardous Waste Annual Report shall be submitted to the Cabinet no later than March 1 of each year. The Hazardous Waste Annual Report shall cover facility activities for the preceding calendar year. The Permittee shall provide a duplicate copy of the Hazardous Waste Annual Report to the Madison County Judge Executive and Emergency Management Agency so that he/she may make the report available to the county law enforcement and emergency services for emergency planning purposes.

The following document is hereby incorporated by reference: "Hazardous Waste Annual Report", DEP Form 7072.

[401 KAR 39:060 Section 5 (18), 401 KAR 39:080 Section 6]

B.III.E.(6) Unmanifested Waste Report

If the Permittee accepts for treatment, storage, or disposal any hazardous waste from an off-site source without an accompanying manifest, or without an accompanying shipping paper, and if the waste is not excluded from the manifest requirement by 401 KAR 39:060 Section 3 and 40 CFR 261.5 (Special Requirements for Hazardous Waste Generated by Conditionally Exempt Small Quantity Generators), then the Permittee shall prepare and submit a single copy of a report to the Manager within fifteen (15) days after receiving the waste. The unmanifested waste report shall be submitted on an approved form. The report shall be designated "Unmanifested Waste Report" and include the following information:

- EPA identification number, name, and address of the facility
- Date the facility received the waste
- EPA identification number, name, and address of the generator and the transporter, if available
- Description and quantity of each unmanifested hazardous waste received
- Method of treatment, storage, or disposal for each hazardous waste
- Certification signed by the Permittee
- Brief explanation of why the waste was unmanifested, if known

[401 KAR 39:090 Section 1, 40 CFR 264.76]

B.III.F. MONITORING REQUIREMENTS

B.III.F.(1) Groundwater Monitoring Requirements

(RESERVED)

B.III.F.(2) Air Monitoring Requirements

When agent waste is present at BGCAPP, the permittee shall continuously monitor airborne concentrations to prevent an exposure exceeding Airborne Exposure Limits, to determine the appropriate level of PPE for workers, and to ensure the general population is not at risk due to airborne agent concentrations.

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The Permittee shall operate agent monitoring systems in accordance with the Permit Application, the Laboratory Analysis and Monitoring Plan (LAMP), the Perimeter Monitoring Plan (PMP), and Monitoring Location and Agent Category Table, which are to be submitted as required by the Schedule of Compliance, Appendix A.

Monitoring at each of the Munitions Demilitarization Building (MDB) HVAC Stacks shall be configured with two NRT instruments. Only one MDB HVAC Stack NRT instrument shall be off-line at any given time per stack for daily challenge and/or maintenance, up to a maximum of 3 hours, when hazardous waste is being processed. New munitions or agent processing shall not be initiated if both MDB HVAC Stack NRT monitors at the same stack are offline at the same time.

Airborne and related exposure limits for GB agent are below:

Level	GPL _(a)	WPL _(b)	STEL _(c)	VSL _(d)
Averaging Time	24 hrs.	12 hrs.	15 min	Variable
Limit (mg/m3)	1x10 ⁻⁶	2x10 ⁻⁵	1x10 ⁻⁴	1x10 ⁻⁴
Monitoring Method	Historic _(e)	Historic _(e)	NRT _(f)	NRT _(f)

- (a) GPL is the General Population Limit and is an airborne agent exposure limit for the general population
- (b) WPL is Worker Population Limit and is an airborne agent exposure limit for the worker population
- (c) STEL is Short Term Exposure Limit and is a concentration based on a 15-minute exposure for an unprotected worker, but is evaluated with an instrument using the shortest analytic cycle time practical to obtain accurate results. Since most NRT cycle times are less than 15min (typically 5-6 min), confirmed readings and durations are used to calculate whether the STEL has been reached or exceeded.
- (d) VSL is Vapor Screening Level and is an agent vapor concentration-only value independent of time. As such, it is used to define a level of contamination for items, wastes, engineering controls systems (for example, filter beds and vestibules) and facilities under specific environmental conditions. VSL is the readout level of certain NRT monitors and the value is applied to process or operational monitoring as opposed to worker exposure.
- (e) Historic monitoring is used when the sample analyzed represents an extended period of time and the results are not known until laboratory analysis is completed after the sampling event has been completed.
- (f) NRT is Near Real-Time monitoring and is conducted with instruments that have the capability to collect, analyze, and report or display results within 15 minutes. They also provide audible and remote alarms when levels are detected at, or above, a specific alarm set point.

[401 KAR 39:060 Section 5, 40 CFR 270.31]

B.III.G. CLOSURE & POSTCLOSURE

Closure and post-closure requirements shall be in accordance with the Closure Plan, Attachment I, which shall be submitted in accordance with the Schedule of Compliance, Appendix A.

[401 KAR 39:090 Section 1, 40 CFR 264.197]

B.III.H. FINANCIAL REQUIREMENTS

Not Applicable

B.III.I. USE AND MANAGEMENT OF CONTAINERS

B.III.I.(1) Condition of Containers

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If a container holding non-munition hazardous waste is not in good condition, including but not limited to severe rusting, apparent structural defects, or if it begins to leak, the Permittee shall transfer the hazardous waste from this container to a container that is in good condition, or use over-packs as appropriate to handle the size of the container.

Before transporting hazardous waste, the waste shall be packaged in accordance with the applicable Department of Transportation regulations on packaging under 49 CFR parts 173, 178, and 179.

[401 KAR 39:080 Section 1, 40 CFR 262.30, 401 KAR 39:090 Section 1, 40 CFR 264.171]

B.III.I.(2) Compatibility of Waste with Containers

The Permittee shall use containers made of, or lined with, materials which do not react with, and are otherwise compatible with, the hazardous waste to be stored so that the ability of the container to contain the waste is not impaired.

[401 KAR 39:090 Section 1, 40 CFR 264.172]

B.III.I.(3) Management of Containers

A container holding hazardous waste shall always be closed during storage except when it is necessary to add or remove waste.

A container holding hazardous waste shall not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.

Containers shall be labeled in accordance with 401 KAR 39:080 Section 1. Hazardous waste containers shall be positioned so that labels are visible and easy to inspect.

Non-hazardous materials/waste may be stored in the container storage areas provided the Permittee:

- Conducts necessary testing and analysis in accordance with the Waste Analysis Plan, Attachment C, of the permit application, in order to ensure that materials stored in the container storage areas are compatible
- Ensures that any products or non-hazardous wastes stored in the container storage areas are counted toward the total permitted container storage volume
- Maintains inventories to ensure that permitted storage capacities are not exceeded
- Complies with all applicable requirements of this permit while storing containers of products or non-hazardous materials/waste in the container storage areas

[401 KAR 39:080 Section 1, 40 CFR 262.31, 40 CFR 262.34, 401 KAR 39:090 Section 1, 40 CFR 264.173, KRS 224.50-130(5), KRS 224.46-530]

B.III.I.(4) Inspections

The container storage areas shall be maintained and operated to allow compliance with the inspection and container management requirements described in the Procedures to Prevent Hazards, Attachment F, which is required to be submitted in accordance with the Schedule of Compliance, Appendix A.

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- Permittee shall conduct weekly inspections for leaking containers and deterioration of containers caused by corrosion or other factors in accordance with the Inspection Schedule, Procedures to Prevent Hazards, Attachment F, of the permit application.
- Permittee shall conduct weekly inspections of secondary containment system in the container storage areas for deterioration in accordance with the Procedures to Prevent Hazards, Attachment F, of the permit application.
- Permittee inspection procedures shall be based upon the Procedures to Prevent Hazards, Attachment F, of the permit application.

[401 KAR 39:090 Section 1, 40 CFR 264.174]

B.III.I.(5) Containment

The container storage areas shall be designed and operated as follows:

- Monitoring and inspection procedures for the container storage areas shall assure the controls and containment systems are working as designed and agent is not escaping
- A base which underlies the containers shall be free of cracks/gaps and be sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is removed
- The base shall be sloped or the containment system shall be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation
- The containment system shall have sufficient capacity to contain ten (10) percent of the volume of containers or the volume of the largest container, whichever is greater. Containers that do not contain free liquids need not be considered in this determination
- Run-on into the containment system shall be prevented unless the collection system has sufficient excess capacity to contain any run-on which might enter the system
- Liquid in secondary containment shall be removed to the maximum extent possible within 24 hours of discovery
- Permittee shall ensure that any products or non-hazardous wastes stored in the container storage areas are counted toward the total permitted container storage volume

[401 KAR 39:090 Section 1, 40 CFR 264.174, 40 CFR 264.175, KRS 224.50-130]

B.III.I.(6) Special Requirements for Ignitable or Reactive Waste

Containers holding ignitable or reactive waste shall be located at least fifteen (15) meters from the facility's property line.

[401 KAR 39:090 Section 1, 40 CFR 264.176]

B.III.I.(7) Special Requirements for Incompatible Wastes

Incompatible chemical related hazardous wastes and materials shall not be placed in the same container. Chemical related hazardous wastes shall not be placed in an unwashed container that previously held an incompatible waste or material. A storage container holding a chemical related

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hazardous waste that is incompatible with any waste or materials stored nearby in other containers, shall be separated from the incompatible materials, or protected from them by means of a dike, berm, wall, or engineering controls.

[401 KAR 39:090 Section 1, 40 CFR 264.177]

B.III.I.(8) Closure

Closure and post-closure requirements shall be in accordance with the Closure Plan, Attachment I, which shall be submitted in accordance with the Schedule of Compliance, Appendix A.

[401 KAR 39:090 Section 1, 40 CFR 264.178]

B.III.I.(9) Air Emission Standards

In addition to the requirements of the HSWA Permit, Attachment N, the Permittee shall manage all hazardous waste placed in a container in accordance with the applicable requirements of 401 KAR 39:090 Section 1, 40 CFR 264.1086.

[401 KAR 39:090 Section 1, 40 CFR 264.179, 40 CFR 264.1086]

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B.III.I.(10) Permitted Container Storage

The following container storage units are permitted and shall be operated and maintained as described in the permit application and this permit.

Permitted Container Storage Area	Designation	Amount & Type of Waste Permitted	Secondary Containment Required	Air Emissions Control	Other Conditions
Container Handling Building	CHB	Munitions (projectiles and rockets) inside EONCs*. Each EONC can hold up to 36 GB projectiles (a total of 522 pound of agent) or 30 GB rockets (a total of 321 pounds of agent). Rockets also have rocket motors and shipping and firing tubes which contain PCB. Rocket warheads contain bursters in addition to agent.	Secondary containment for munitions while they are in the CHB is provided by EONCs. EONCs are approximately 8.5 feet wide by 12 feet long by 8.5 feet high.	EONCs are airtight; seal is verified with NRT monitoring.	EONCs shall not be opened in the CHB. No more than 53 EONCs shall be stored. No more than 58 gallons of agent may be stored in each EONC. An EONC containing munitions that remains in the CHB for more than one week shall be monitored for agent at least once per week.
Waste Transfer Station	WTS	WTS building shall store up to 24,000 gallons, tanker storage area shall store up to 120,000 gallons and bulk solids storage area shall store up to 32,500 gallons. The wastes are various secondary wastes that will be generated at the BGCAPP prior to shipment to treatment and disposal facilities.	In the container storage building, containers with liquids shall be stored on spill pallets. In the tanker storage area, tankers shall be stored in three secondary containment areas which shall provide not less than 40,000 gallons capacity each.	Containers are closed except when adding or removing material.	Roll-off containers shall not contain free liquids.
Box Transfer Areas 1 & 2	Room 07-165 Room 07-166	Separated rocket motors and SFTs. Each room shall store up to eight boxes containing thirty rocket motors per box.	Not applicable – no free liquids.	See Attachment N, HSWA permit.	Storage shall be limited to the storage of separated rocket motors and empty shipping and firing tube segments.
Agent Neutralization System (ANS) Storage Area	Room 07-123	Various secondary wastes and spent decontamination solution, not to exceed 2,750 gallons.	Liquid in sumps will be transferred to the Spent Decontamination System (SDS) tanks.	Storage in bags or level 1 containers that are closed except when adding or removing material.	Storage shall be limited to the storage of miscellaneous secondary wastes and spent decontamination solution. No more than 2,750 gallons shall be permitted in this area.
Tray/Container Transfer Room	Room 07-124	Thermally decontaminated metal parts, metal parts treater residue	Spill pallets for wastes with free liquids.	See Attachment N, HSWA Permit	Storage shall not exceed 8,190 gallons
Metal Parts Treater Cooling Conveyor Storage Area	Room 07-150	Thermally decontaminated metal parts, metal parts treater residue	Spill pallets for wastes with free liquids.	See Attachment N, HSWA Permit	Storage shall not exceed 8,190 gallons
Toxic Maintenance Area Storage Area	Room 07-125	Permitted storage shall be limited to the storage of miscellaneous waste in drums, contaminated equipment and leaking munitions.	Coated concrete floor with curb and sump.	Storage in bags or level 1 containers that are closed except when adding or removing material.	Storage shall not exceed 5,500 gallons.

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Permitted Container Storage Area	Designation	Amount & Type of Waste Permitted	Secondary Containment Required	Air Emissions Control	Other Conditions
Explosive Containment Vestibule Storage Areas 1 & 2	Room 07-103 Room 07-106	Nerve agent GB in projectiles and rockets shall be stored prior to treatment.	Coated concrete floor, sumps and perimeter curbs and walls	Storage in bags or level 1 containers that are closed except when adding or removing material.	Storage shall not exceed 275 gallons.
Unpack Areas 1 & 2	Room 07-101 Room 07-128	Munitions and various secondary wastes.	Storage of containers shall be inside of an EONC or on a secondary containment pallet.	EONCs closed except when adding or removing munitions.	Storage shall not exceed 2,400 gallons for each unpack area.
Motor Packing Room	Room 07-163	2 boxes of 30 rocket motors and 2 boxes of shipping and firing tubes.	Not applicable – no free liquids.	See Attachment N, HSWA Permit	Storage shall be limited to the storage of separated rocket motors and empty shipping and firing tube segments. Storage shall not exceed 350 gallon capacity for storage of 2 boxes of 30 rocket motors per box and 2 boxes of empty shipping and firing tubes.
Motor Shipping Room	Room 07-168	Two boxes of 30 rocket motors and 2 boxes of shipping and firing tubes.	Not applicable – no free liquids.	See Attachment N, HSWA Permit	Storage shall be limited to the storage of separated rocket motors and empty shipping and firing tube segments. Storage shall not exceed 350 gallon capacity for storage of 2 boxes of 30 rocket motors per box and 2 boxes of empty shipping and firing tubes.
Explosive Containment Room Storage Areas 1 & 2	Room 07-104 Room 07-105	Various secondary wastes.	Coated concrete floors, sumps, curbs, and walls.	Storage in bags or level 1 containers that are closed except when adding or removing material.	Storage shall not exceed 55 gallons per room.
Munitions Washout System Reject Table	Room 07-135	Chemical agent GB containing projectiles.	Coated concrete floor with drainage to sumps.	Storage in projectile, with any volatile organic emissions controlled by the MDB HVAC system.	Limited to projectiles that cannot be processed. Storage shall not exceed 5 gallons.
SCWO Processing Building Storage Area	SPB	Miscellaneous secondary waste, such as Aluminum Filtration System (AFS) filter cake.	Coated concrete floor with curbs, spill pallets.	Storage in bags or level 1 containers that are closed except when adding or removing material.	Limited to the storage of AFS filter cake and various secondary wastes in roll-off containers and drums. Storage of no more than 8,550 gallons shall be permitted in this area.

*EONC = Enhanced onsite containers

[401 KAR 39:090 Section 1, 40 CFR 264 Subpart I]

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B.III.J. TANK SYSTEMS

B.III.J.(1) Records

The Permittee shall obtain and keep on file at the facility the Tank Assessment Reports and other written statements by those persons required to certify the design of the tank system and supervise the installation of the tank system that attest that the tank system was properly designed, installed, and that repairs, if necessary, were performed.

Certification of proper design and installation of BGCAPP tank systems is required to be submitted to the Division by the Schedule of Compliance, Appendix A.

[401 KAR 39:090 Section 1, 40 CFR 264.192]

B.III.J.(2) General Operating Requirements

For all waste storage tanks, operating volume (defined as the volume contained within the tank from the bottom elevation of the tank to the HHLL elevation) is the equivalent of maximum capacity for RCRA purposes and shall not be exceeded.

Hazardous wastes or treatment reagents shall not be placed in a tank system if they may cause the tank, its ancillary equipment, or the secondary containment system to rupture, leak, or otherwise fail.

The Permittee shall use appropriate controls and practices to prevent spills and overflows from tank or secondary containment systems. These include at a minimum:

- Spill prevention controls (for example, check valves or dry disconnect couplings)
- Overfill prevention controls (for example, level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank)
- Maintenance of sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action or by precipitation

[401 KAR 39:090 Section 1, 40 CFR 264.194]

B.III.J.(3) Inspections

B.III.J.(3)(a) Controls

The Permittee shall develop and follow a schedule and procedures for inspecting overfill controls.

The Permittee shall inspect at least once each operating day data gathered from monitoring and leak detection equipment to ensure that the tank system is being operated according to its design.

[401 KAR 39:090 Section 1, 40 CFR 264.195]

B.III.J.(3)(b) Tanks

In addition, the Permittee shall inspect at least once each operating day:

- Above ground portions of the tank system, if any, to detect corrosion or releases of waste.

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- The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system, to detect erosion or signs of releases of hazardous waste.

[401 KAR 39:090 Section 1, 40 CFR 264.195]

B.III.J.(3)(c) Coatings

The coatings system providing secondary containment in the MDB and SPB shall be:

- Free of cracks and gaps
- Adhered to the structure beneath the coating
- Inspected in accordance with the Inspection Plan required by the Schedule of Compliance, Appendix A.

[401 KAR 39:090 Section 1, 40 CFR 264.195]

B.III.J.(3)(d) Leak Detection

Leak detection systems to alert facility personnel to leaks shall be inspected at least weekly. Use of the alternate inspection schedule shall be documented in the facility's Operating Record. This documentation shall include a description of the established workplace practices at the facility.

[401 KAR 39:090 Section 1, 40 CFR 264.195]

B.III.J.(3)(e) Ancillary Equipment

Ancillary equipment that is not provided with secondary containment shall be inspected at least once each operating day.

The Permittee shall document each inspection in the Operating Record.

[401 KAR 39:090 Section 1, 40 CFR 264.195]

B.III.J.(4) Response to Leaks or Spills and Disposition of Leaking or Unfit-for-Use Tank Systems

A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, shall be removed from service immediately, and the Permittee shall satisfy the following requirements:

- Immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release
- If the release was from the tank system, within 24 hours after detection of the leak, or if the Permittee demonstrates that it is not possible, at the earliest practicable time, remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system to be performed.
- If the material was released to a secondary containment system, all released materials must be removed within 24 hours or in as timely a manner as is possible to prevent harm to human health and the environment.

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- Immediately conduct a visual inspection of the release and based upon that inspection shall:
 - Prevent further migration of the leak or spill to soils or surface water
 - Remove, and properly dispose of, any visible contamination of the soil or surface water
- Follow the reporting and notification procedures in this permit for a release
- Repair the failed component or close the tank system
- If the Permittee has repaired a tank system, and the repair was extensive (for example, installation of an internal liner, repair of a ruptured primary containment or secondary containment vessel), the tank system shall not be returned to service until the Permittee has obtained a certification by a professional engineer licensed in the Commonwealth of Kentucky, that the repaired system is capable of handling hazardous wastes without release for the intended life of the system
- This certification shall be submitted to and approved by the Cabinet before returning the tank system to use
- This certification shall be placed in the operating record and maintained until closure of the facility

[401 KAR 39:060 Section 5, 40 CFR 270.65, 401 KAR 39:090 Section 1, 40 CFR 264.196]

B.III.J.(5) Closure and Post-closure Care

Closure and post-closure requirements shall be in accordance with the Closure Plan, Attachment I, which shall be submitted in accordance with the Schedule of Compliance, Appendix A.

[401 KAR 39:090 Section 1, 40 CFR 264.197]

B.III.J.(6) Special Requirements for Ignitable or Reactive Wastes

Ignitable or reactive waste shall not be placed in a tank unless:

The waste is treated, rendered, or mixed before or immediately after placement in the tank so that:

- The resulting waste, mixture or dissolved material no longer meets the definition of ignitable or reactive waste;
- 401 KAR 39:090 Section 1, as governed by 40 CFR 264.17(b) (General Requirements for Ignitable, Reactive, or Incompatible Wastes) is complied with; or
- The waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react; or
- The tank system is used solely for emergencies.

[401 KAR 39:090 Section 1, 40 CFR 264.198]

B.III.J.(7) Special Requirements for Incompatible Wastes

Incompatible wastes, or incompatible wastes and materials shall not be placed in the same tank, and hazardous waste shall not be placed in a tank system that has not been decontaminated and that previously held an incompatible waste or material; unless the Permittee takes precautions to prevent reactions which:

- Generate extreme heat or pressure, fire or explosions, or violent reactions
- Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment

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- Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosion
- Damage the structural integrity of the device or facility
- Through other like means threaten human health or the environment

[401 KAR 39:090 Section 1, 40 CFR 264.17(b), 40 CFR 264.198]

B.III.J.(8) Air Emission Standards

In addition to the requirements of the HSWA Permit, Attachment N, the Permittee shall manage all hazardous waste placed in a tank in accordance with the applicable requirements of 401 KAR 39:090 Section 1.

The headspace of all agent and agent-contaminated storage tanks inside the MDB shall be vented through the off-gas treatment system (OTM) or MDB HVAC filtration system.

The headspace of all hydrolysate storage tanks in the HSA shall be vented through the MDB HVAC filtration system.

The headspace of all waste storage tanks prior to the SCWO reactors inside the SPB shall be vented through the SPB HVAC filtration system, except the Aluminum Precipitation Reactor Tanks, which shall be vented to activated carbon canisters.

[401 KAR 39:090 Section 1]

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B.III.J.(9) Permitted Tank Systems

The following tank systems are permitted and shall be operated and maintained as described in the permit application and this permit.

Permitted Tank	Designation	Type of Waste	Secondary Containment Required	Air Emissions Control	Amount of Waste and Other Conditions
Agent Hydrolysate Storage Tanks	MT-HSS-0105, MT-HSS-0205, MT-HSS-0104	Agent hydrolysate	Coated concrete containment basin	Subpart CC vents to HVAC activated carbon	Three tanks for storage of agent hydrolysate are permitted. Volume stored in MT-HSS-0104 shall not exceed 103,195 gallons. Volume stored in MT-HSS-0205 and MT-HSS-0105 shall not exceed 336,943 gallons each. During GB campaign, MT-HSS-0104 may be used to store OTM condensate.
Energetics Hydrolysate Storage Tanks	MT-HSS-0604, MT-HSS-0704	Energetics hydrolysate	Coated concrete containment basin	Subpart CC vents to HVAC activated carbon	Two tanks for storage of energetics hydrolysate are permitted. Volume shall not exceed 316,192 gallons.
Agent Holding Tank	MT-ACS-0105	GB agent	Coated concrete floor with curbs and sumps	Subpart CC vents to TOX	One agent holding tank is permitted for storing drained agent prior to treatment in the agent hydrolyzer. The tank has a volume of 1,856 gallons.
Agent Surge Tank	MT-ACS-0106	GB agent	Coated concrete floor with curbs and sumps	Subpart CC vents to TOX	One agent surge tank is permitted for storage of drained agent or agent spilled from the spent decontamination system prior to treatment in the agent hydrolyzer. The tank has a volume of 1,856 gallons.
Agent Neutralization Reactors	MV-ANS-0101, MV-ANS-0201	GB agent and agent hydrolysate	Coated concrete with curbs and sumps	Subpart CC vents to TOX	Two agent neutralization reactors are permitted for neutralizing agent before it is sent to the agent hydrolysate sampling tanks. The treatment tanks have a volume of 2,251 gallons.
Agent Hydrolysate Sampling Tanks	MT-ANS-0103, MT-ANS-0203, MT-ANS-0303	Agent hydrolysate	Coated concrete with curbs and sump	Subpart CC vents to TOX	Three agent hydrolysate sampling tanks are permitted for storage of agent hydrolysate until sampling is performed. Cleared hydrolysate may be transferred to the agent hydrolysate storage tanks. Each tank has a volume of 5,865 gallons each.
Energetics Neutralization Reactors (ENR)	MV-ENS-0101, MV-ENS-0102, MV-ENS-0103	Energetics, primarily rocket bursters and rocket propulsion and energetics hydrolysate	Coated concrete with curb and sump	Subpart CC vents to TOX	Three energetics neutralization reactors are permitted for ensuring destruction of agent, energetics and cyanide ion. The Pilot Demonstration Test results shall demonstrate cyanide destruction and establish cyanide clearance criteria for energetics hydrolysate. Three reactors are permitted for a volume of 3,038 gallons each.
Spent Decontamination System (SDS) Tanks	MV-SDS-0101, MV-SDS-0201, MV-SDS-0301	Spent decontamination solution	Coated concrete floor with curb and sump	Subpart CC vents to TOX	Three tanks are permitted for storing spent decontamination solution. The storage units have a volume of 9,769 gallons each.
Hydrolysate Collection Tank	MT-EBH-1901	Energetics hydrolysate	Coated concrete floor with curb and sump	Subpart CC vents to HVAC activated carbon	One tank is permitted for collecting and storing energetics hydrolysate. The storage unit has a volume of 1,657 gallons.
Aluminum Precipitation Reactor	MV-APS-0101, MV-APS-0102	Energetics hydrolysate	Coated concrete floor with curbs and sumps	Subpart CC vents to activated carbon canisters	Two tanks are permitted for precipitating aluminum out of the energetics hydrolysate. Each treatment unit has a volume of 1,523 gallons.
Off-Spec Effluent Tank	MT-SCWO-0041	SCWO effluent	Coated concrete floor with curbs and sumps	Subpart CC vents to HVAC activated carbon	One tank is permitted for storage of SCWO effluent that doesn't meet specifications for release to the RO units. The storage unit has a volume of 4,807 gallons.
Emergency Relief Tank	MT-SCWO-0040	SCWO contents, consisting of blended agent and energetics hydrolysate	Coated concrete floor with curbs and sumps	Subpart CC vents to HVAC activated carbon	One tank is permitted for storage of SCWO reactor contents in the event of an emergency shutdown. The storage unit has a volume of 11,064 gallons. However, any incidence of exceeding the High-High Liquid Level of 25 inches (2350 gallons) will result in a violation of the BGCAPP RCRA permit.
Hydrolysate Blend Tank	MT-SCWO-0030, MT-SCWO-0031	Agent hydrolysate, energetics hydrolysate	Coated concrete floor with curbs and sumps	Subpart CC vents to HVAC activated carbon	Two tanks are permitted for blending of agent hydrolysate, energetics hydrolysate, and feed additives to feed the SCWO reactor. The storage units have a volume of 6,662 gallons each.

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Permitted Tank	Designation	Type of Waste	Secondary Containment Required	Air Emissions Control	Amount of Waste and Other Conditions
Batch Hydrolysate Holding Tank	MT-SCWO-0032	Agent hydrolysate, energetics hydrolysate	Coated concrete floor with curbs and sumps	Subpart CC vents to HVAC activated carbon	One tank is permitted for temporary storage of hydrolysate batches whose composition is unacceptable for processing in the SCWO reactors. The storage unit has a volume of 6,662 gallons.
Aluminum Filtration Feed Tank	MT-AFS-1010, MT-AFS-2010	Energetics hydrolysate	Coated concrete floor with curbs and sumps	Subpart CC vents to HVAC activated carbon	Two tanks are permitted. The storage units have a volume of 1,915 gallons each.
Aluminum Filtrate Tank	MT-AFS-1012	Energetics hydrolysate	Coated concrete floor with curbs and sumps	Subpart CC vents to HVAC activated carbon	One tank is permitted for storage of filtered energetics hydrolysate from the Aluminum Filtration System prior to feeding SCWO Hydrolysate Blend tanks. The storage unit has a volume of 4,884 gallons.
RO Reject Tank	MT-RO-0106, MT-RO-0206	Reverse osmosis reject (SCWO effluent that contains too much salt to use for plant service water)	Coated concrete floor with curbs and sumps	None required	Two tanks are permitted for storing Reverse Osmosis Reject prior to shipment off site. The storage units have a volume of 84,782 gallons each.
SCWO Effluent Tanks	MT-SCWO-0101, MT-SCWO-0201, MT-SCWO-0301	SCWO effluent	Coated concrete containment basin	None required	Three tanks are permitted for storage of SCWO effluent prior to processing through the Reverse Osmosis System. The storage units have a volume of 50,898 gallons each.
RO Permeate Tanks	MT-SWS-0101, MT-SWS-0201	RO permeate	Coated concrete containment basin	None required	Two tanks are permitted for storage of RO permeate prior to use for makeup water. The storage units have a volume of 57,858 gallons each.

[401 KAR 39:090 Section 1, 40 CFR 264 Subpart J, 401 KAR 39:060 Section 5, 40 CFR 270.16]

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B.III.K. SURFACE IMPOUNDMENTS	(RESERVED)	
B.III.L. WASTE PILES		(RESERVED)
B.III.M. LAND TREATMENT		(RESERVED)
B.III.N. LANDFILLS POST CLOSURE REQUIREMENTS		(RESERVED)
B.III.O. INCINERATORS/BIF		(RESERVED)
B.III.P.		(RESERVED)
B.III.Q.		(RESERVED)
B.III.R.		(RESERVED)
B.III.S. SPECIAL PROVISIONS FOR CLEANUP		(RESERVED)
B.III.T.		(RESERVED)
B.III.U.		(RESERVED)
B.III.V.		(RESERVED)
B.III.W. DRIP PADS	(RESERVED)	
B.III.X. MISCELLANEOUS UNITS		

B.III.X.(1) Environmental Performance Standards

B.III.X.(1)(a) Destruction and Removal Efficiency

Facilities shall be operated and maintained to achieve a 99.9999 percent destruction or removal of each substance treated or destroyed, as required by condition B.III.A.(7).

[KRS 224.50-130(3), 401 KAR 39:090 Section 1, 40 CFR 264.601]

B.III.X.(1)(b) Protection of Human Health and the Environment

Miscellaneous units shall be operated, maintained, and closed in a manner that shall ensure protection of human health and the environment.

[401 KAR 39:090 Section 1, 40 CFR 264.601]

B.III.X.(1)(c) No Harmful Releases to Soil, Surface Water, or Groundwater

The Permittee shall prevent any releases from miscellaneous units that may have adverse effects on human health or the environment due to migration of waste constituents in surface water, or wetlands, or on the soil surface.

[401 KAR 39:090 Section 1, 40 CFR 264.601]

B.III.X.(1)(d) No Harmful Releases to Atmosphere

The Permittee shall prevent any release from miscellaneous units that may have adverse effects on human health or the environment due to migration of waste constituents in the air.

[401 KAR 39:090 Section 1, 40 CFR 264.601]

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B.III.X.(2) Monitoring, Analysis and Inspection

B.III.X.(2)(a) Monitoring and Analysis

Monitoring, testing, analytical data, inspections, response, and reporting procedures and frequencies must ensure compliance with 401 KAR 39:090 Section 1, as well as meet any additional requirements needed to protect human health and the environment. All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, shall be tested and maintained as necessary to assure its proper operation in time of emergency.

[401 KAR 39:090 Section 1, 40 CFR 264.602]

B.III.X.(2)(b) Inspection

The Permittee shall inspect his facility for malfunctions and deterioration, operator errors, and discharges which may be causing—or may lead to—(1) release of hazardous waste constituents to the environment or (2) a threat to human health. The Permittee shall conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment.

- The Permittee shall develop and follow a written schedule for inspecting monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards.
- This schedule shall be kept at the facility.
- The schedule shall identify the types of problems (for example: malfunctions or deterioration) which are to be looked for during the inspection (for example: inoperative sump pump, leaking fitting, eroding dike).
- The frequency of inspection may vary for the items on the schedule. However, the frequency should be based on the rate of deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, shall be inspected daily when in use.

[401 KAR 39:090 Section 1, 40 CFR 264.602]

B.III.X.(3) Closure and Post-closure

Closure and post-closure requirements shall be in accordance with the Closure Plan, Attachment I, which shall be submitted in accordance with the Schedule of Compliance, Appendix A.

[401 KAR 39:090 Section 1, 40 CFR 264.603]

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B.III.X.(4) Permitted Miscellaneous Units

The following miscellaneous units are permitted and shall be operated and maintained as described in the permit application and this permit.

Permitted Miscellaneous Unit	Designation	Amount and types of waste	Secondary containment	Air emissions	Other conditions
Energetics Batch Hydrolyzers	MV-EBH-1101, MV-EBH-1201, MV-EBH-1301	Sheared rocket warheads containing bursters and residual agent. Entire rocket, including warhead, SFT, and motor during leaker campaign.	Coated concrete floor with curb and sump.	OTE off-gas treatment system, MDB HVAC system carbon	Three units are permitted for receiving sheared rocket warhead pieces and neutralizing energetics and residual agent. Permitted capacity is 1,150 gallons for each Energetics Batch Hydrolyzer.
Nose Closure Removal System (NCRS)	MY-NCR-0101	Approximately 3,977 projectiles containing approximately 14.5 pounds of GB each.	Coated concrete floor with curb and sump.	MDB HVAC system carbon	One unit is permitted to remove nose closure/lifting plugs from GB projectiles. The permitted capacity is 350 pounds per hour.
Rocket Cutting Machines (RCM)	MX-RHS-0113, MX-RHS-0114	Approximately 51,700 rockets containing 10.7 pounds of GB.	Coated concrete floor with curb and sump.	MDB HVAC system carbon	Two rocket cutting machines are permitted for separating rocket motors from rocket warheads. The permitted capacity is 1,140 pounds per hour.
Rocket Shear Machine (RSM)	MY-RHS-0101, MY-RHS-0102	Approximately 51,700 rockets containing 10.7 pounds of GB.	Coated concrete floor with curb and sump.	MDB HVAC system carbon	Two rocket shear machines are permitted for punching and draining the rocket warhead and shearing the warheads into segments. The permitted capacity is 1,140 pounds per hour.
Metal Parts Treators (MPT)	ME-MPT-0101, ME-MPT-0201	Drained munitions, secondary wastes.	Coated concrete floor with curb and sump.	OTM off-gas treatment system, MDB HVAC system carbon	Two metal parts treaters are permitted for thermal decontamination of metal parts and various secondary wastes. The permitted capacity is 11,770 pounds per hour. Qualitative assessment of agent feed to the MPT shall be limited to the maximum estimated mass per projectile and per tray successfully demonstrated as agent free during the Pilot Test required by Appendix A. Higher estimated agent feed shall require re-demonstration of agent free items exiting the MPT and Division approval. All wastes treated in the Metal Parts Treater shall be treated to a minimum of 1,000 degrees Fahrenheit for a minimum of 15 minutes prior to discharge. All material and emissions exiting the MPT cooling chamber shall be monitored according to the MPT Monitoring Plan required by the Schedule of Compliance, Appendix A.
Munitions Washout System (MWS)	MZ-MWS-0101D, MZ-MWS-0101E	Approximately 3,977 projectiles containing approximately 14.5 pounds of GB each.	Coated concrete floor with curb and sump.	MDB HVAC system carbon	Two munitions washout systems are permitted for accessing the projectile cavity and draining agent from the projectiles. The permitted capacity is 910 pounds per hour per unit. Any projectile containing energetic material shall be rejected and not processed through the Munitions Washout System.
Aluminum Filtration Units	ML-AFS-1040, ML-AFS-2040	Energetics hydrolysate from rockets.	Coated concrete floor with curb and sump.	SPB HVAC system	Two aluminum filtration units are permitted for receiving precipitated hydrolysate and filtering out the aluminum prior to processing the hydrolysate in the SCWO. The permitted capacity is 2,500 pounds per hour.
Reverse Osmosis (RO) Units	ML-RO-0101, ML-RO-0201, ML-RO-0301	Three units are provided to treat 64,800 gallons per day each.	Coated concrete floor with curb and sump.	Not applicable	Three reverse osmosis units are permitted for removing dissolved solids from SCWO effluent. The permitted capacity is 129,600 gallons per day.
SCWO Reactors	MV-SCWO-1030, MV-SCWO-2030, MV-SCWO-3030	Each unit can treat 1,200 pounds per hour of filtered and blended hydrolysate.	Coated concrete floor with curb and sump.	Tight pressure vessel, blow-down to emergency relief tank with control vent, if necessary	Three SCWO reactors are permitted for treating hydrolysates by supercritical water oxidation. The permitted capacity is 1,200 pounds per hour per unit.
Handling of chemical agent compounds and chemical munitions	N/A	Chemical agent GB contained in approximately 51,682 rockets, 58 rocket warheads, and 3,977 8 inch projectiles.			Chemical agent compounds shall be transported in EONCs, during daylight hours only. EONCs shall be operated and maintained to meet requirements for secondary containment. Air monitoring of the munitions within an EONC shall be conducted prior to opening the EONC to determine if any of the munitions leaked during transportation. If air monitoring detects agent within the EONC, the EONC shall not be opened unless it is within engineering controls.

[KRS 224.50-130(5), 401 KAR 39:090 Section 1, 40 CFR 264 Subpart X]

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B.III.Y.	(RESERVED)
B.III.Z.	(RESERVED)
B.III.AA. AIR EMISSION STANDARDS FOR PROCESS VENTS	(RESERVED)
B.III.BB. AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS	(RESERVED)
B.III.CC. AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, CONTAINERS	(RESERVED)
B.III.DD. CONTAINMENT BUILDINGS	(RESERVED)
B.III.EE. HAZARDOUS WASTE MUNITIONS AND EXPLOSIVES STORAGE	(RESERVED)

PART IV CORRECTIVE ACTION FOR SWMUs AND AOCs

B.IV.A. APPLICABILITY

The requirements for corrective action for all SWMUs and AOCs prior to the issuance of this permit are addressed in the Blue Grass Army Depot Hazardous Waste Part B permit. Any corrective action related requirements for the Hazardous Waste Management Units within this Research, Development and Demonstration permit shall be addressed in the closure plan(s) for those units.

PART V REFERENCED ATTACHMENTS

B.V.A. Attachment A, Part A

Part A of the Permit Application is incorporated as Attachment A of this permit.

[401 KAR 39:090 Section 1, 40 CFR 264.1, 401 KAR 39:060 Section 5, 40 CFR 270.13]

B.V.B. Attachment B, Facility Description

Part B of the Permit Application, Facility Description, is incorporated as Attachment B of this permit.

[401 KAR 39:090 Section 1, 40 CFR 264.13, 401 KAR 39:060 Section 5, 40 CFR 270.14(b)(1)]

B.V.C. Attachment C, Waste Analysis Plan

Part C of the Permit Application, Waste Analysis Plan, shall be incorporated as Attachment C of this permit. The Waste Analysis Plan is a Compliance Schedule item which will be incorporated into this Permit when approved. See Compliance Schedule, Appendix A.

[401 KAR 39:090 Section 1, 40 CFR 264.13, 401 KAR 39:060 Section 5, 40 CFR 270.14]

B.V.D. Attachment D, Process Information

Part D of the Permit Application, Process Information, is incorporated as Attachment D of this permit.

[401 KAR 39:090 Section 1, 40 CFR 264 Subparts I, J, and X, 401 KAR 39:060 Section 5, 40 CFR 270.14(b)(1)]

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B.V.E. (RESERVED)

B.V.F. Attachment F, Procedures to Prevent Hazards

Part F of the Permit Application, Procedure to Prevent Hazards, is incorporated as Attachment F of this permit. At the time of permit issuance, a section of the Procedures to Prevent Hazards is a Compliance Schedule item. That section will be incorporated into this Permit when it is approved. See Schedule of Compliance, Appendix A.

[401 KAR 39:090 Section 1, 40 CFR 264 Subpart C, 401 KAR 39:060 Section 5]

B.V.G. Attachment G, Contingency Plan

Part G of the Permit Application, Facility Contingency Plan, is incorporated as Attachment G-1 of this permit. The Chemical Accident or Incident Response and Assistance (CAIRA) Plan is incorporated as Attachment G-2 of this permit.

[401 KAR 39:090 Section 1, 40 CFR 264 Subpart D, 401 KAR 39:060 Section 5]

B.V.H. Attachment H, Personnel Training

Part H of the Permit Application, Facility Personnel Training, is incorporated as Attachment H of this permit.

[401 KAR 39:090 Section 1, 40 CFR 264.16, 401 KAR 39:060 Section 5]

B.V.I. Attachment I, Closure Plan

At the time of permit issuance, Part I of the Permit Application, Closure Plan, is a Compliance Schedule item. The Closure Plan will be incorporated as Attachment I of this permit when it is approved. See Schedule of Compliance, Appendix A.

[401 KAR 39:090 Section 1, 40 CFR 264 Subpart G, 401 KAR 39:060 Section 5]

B.V.J. Attachment J, Other Federal Laws

Part J of the Permit Application, Other Federal Laws, is incorporated as Attachment J of this permit.

B.V.K. Attachment K, Waste Minimization

Part K of the Permit Application, Facility Waste Minimization Program, is incorporated as Attachment K of this permit.

[40 CFR 262.27]

B.V.L. Attachment L, Signatures

Part L of the Permit Application, Permittee Signatures, is incorporated as Attachment L of this permit.

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B.V.M. Attachment M, Multi-Pathway Human Health Risk Assessment (MPHHRA) Report for Blue Grass Chemical Agent – Destruction Pilot Plant

The MPHHRA is a Compliance Schedule item and when approved will be incorporated as Attachment M of this Permit. See Schedule of Compliance, Appendix A.

[KRS 224.46-530]

B.V.N. Organic Air Requirements

(RESERVED)

PART VI WASTE MINIMIZATION

B.VI.A. PROGRAM

The Permittee shall implement a program to reduce the volume and toxicity of hazardous waste in accordance with the Waste Minimization Plan, Attachment K, and applicable regulations.

[40 CFR 262.27]

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Appendix A – Compliance Schedule

1. Submit to the Division, Procedures to Prevent Hazards, Inspection Schedule.
 - a. Submit no later than 12 months prior to the receipt of hazardous waste
 - b. Address the frequency of inspecting, repair and replacement, and spill cleanup for the coating system used as an equivalent secondary containment device
 - c. Identify where drip pans have been provided as part of the equivalent device and specify an inspection procedure
 - d. Approval required prior to receipt of hazardous waste

[401 KAR 39:060 Section 5, 40 CFR 264.15, 40 CFR 270.14(b)(5)]

2. Submit to the Division, Waste Analysis Plan.
 - a. Submit no later than 18 months prior to the receipt of hazardous waste
 - b. Approval required prior to receipt of hazardous waste

[401 KAR 39:090 Section 1, 40 CFR 264.13, 401 KAR 39:060 Section 5, 40 CFR 270.14(3)]

3. Submit to the Division, Closure Plan.
 - a. The Closure Plan shall identify steps necessary to perform partial and final closure of the facility at any point during its active life. The Closure Plan shall comply with 401 KAR 39:090 Section 1 and 40 CFR 264 Subpart G.
 - b. Submit no later than receipt of hazardous waste
 - c. Approval required prior to beginning closure activities

[401 KAR 39:090 Section 1, 40 CFR 264 Subpart G, 401 KAR 39:060 Section 5]

4. Submit to the Division, Equipment Decontamination Plan.
 - a. Submit no later than 9 months prior the receipt of hazardous waste
 - b. Approval required prior to receipt of hazardous waste

[401 KAR 39:090 Section 1, 40 CFR 264.114]

5. Submit to the Division, Human Health Risk Assessment.
 - a. Use KDEP approved risk assessment protocol
 - b. Submit no later than 18 months prior to the receipt of hazardous waste
 - c. Approval required prior to the receipt of hazardous waste

[224.46-130(1)(g), 401 KAR 39:60 Section 5, 40 CFR 270.23(c)]

6. Submit to the Division, Laboratory Analysis and Monitoring Plan.
 - a. Provide a revised Laboratory Analysis and Monitoring Plan
 - b. Submit no later than 18 months prior to the receipt of hazardous waste
 - c. Approval required prior to the receipt of hazardous waste

[401 KAR 39:090 Section 1, 401 KAR 39:060 Section 5, 40 CFR 264.602, 40 CFR 270.31]

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7. Submit to the Division, Metal Parts Treater(s) Monitoring Plan.
 - a. Provide a plan for agent monitoring downstream of the Metal Parts Treater
 - b. Submit no later than 12 months prior the receipt of hazardous waste
 - c. Approval required prior to receipt of hazardous waste

[401 KAR 39:090 Section 1, 40 CFR 264.602]

8. Submit to the Division, Concept Test Plan for Test Equipment and Surrogate Testing.
 - a. Submit Concept Test Plans for Test Equipment, and Surrogate Testing including: objectives, duration, data to be collected, a description of the items being treated, and an estimate of the number to be processed
 - b. Submit no later than 12 months prior to the receipt of hazardous waste
 - c. Approval required prior to receipt of hazardous waste

[KRS 224.50-130(3), 401 KAR 39:090 Section 1, 40 CFR 264.601]

9. Submit to the Division, Pilot Test Demonstration Plan.
 - a. Submit a test plan for ramp-up that includes objectives, duration, and data to be collected
 - b. Submit a test plan for each waste treatment system, off-gas treatment system, and air pollution control system
 - c. Provide a test plan for demonstrating 99.9999% DRE
 - d. Provide a schedule for conducting Pilot Testing activities
 - e. Submit no later than 12 months prior to the receipt of hazardous waste
 - f. Approval required prior to receipt of hazardous waste

[KRS 224.50-130(3), 401 KAR 39:090 Section 1, 40 CFR 264.601]

10. Submit to the Division, Pilot Test Demonstration Report.
 - a. Submit a test report, including data collected during testing, for:
 - i. Each system as tests are completed
 - ii. Air Emissions Testing and Integrated Facility Demonstration
 - iii. Demonstrating DRE
 - b. Submit each test report within 60 days of completion of test
 - c. Approval required prior to closing the Pilot Testing Phase of operations

[KRS 224.50-130(3), 401 KAR 39:090 Section 1, 40 CFR 264.601]

11. Submit to the Division, Hydrolysate Analysis.
 - a. Identify any hazardous organic constituents listed in 40 CFR Part 261, Appendix VIII, which are present in hydrolysate, except that the permittee need not analyze for constituents listed in part 261, Appendix VIII, which would reasonably not be expected to be found in the waste. The constituents excluded from analysis shall be identified, and the basis for the exclusion stated. The analysis shall rely on appropriate analytical techniques.
 - b. Submit no later than 3 months following the production of hydrolysate

[401 KAR 39:090 Section 1, 40 CFR 264.13, 401 KAR 39:060 Section 5, 40 CFR 270.14]

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12. Submit to the Division, RCRA Operations Plan.

- a. Submit a plan that specifies the operating parameters of permitted waste treatment and storage systems, off-gas treatment systems, air pollution control systems, and agent monitoring systems
- b. Submit no later than 12 months prior to the receipt of hazardous waste
- c. Approval required prior to receipt of hazardous waste

[401 KAR 39:090 Section 1, 40 CFR 264.601, 401 KAR 39:060 Section 5, 40 CFR 270.23(a)(2)]

13. Submit to the Division, Secondary Waste Disposal Certification.

- a. Provide certification that a permitted facility or facilities have been identified, and has conditionally agreed to accept each of the secondary wastes generated
- b. Provide in the certification, the name and location of the permitted facilities
- c. Required 1 month prior to the receipt of hazardous waste
- d. If additional permitted facilities are contracted to receive secondary hazardous waste generated after BGCAPP begins processing hazardous waste, provide the name and location of the facility one month prior to shipping secondary hazardous waste to said facility

[401 KAR 39:060 Section 4, KRS 224.46-530, KRS 224.50-130]

14. Submit to the Division, Facility Construction Certification.

- a. A letter signed by the Permittee and a licensed professional engineer stating that the facility has been constructed or modified in compliance with the Permit and applicable regulations
- b. At least 3 months prior to receipt of hazardous waste

[401 KAR 39:060 Section 5, 40 CFR 270.30]

15. Submit to the Division, Process Information, Tank Certification.

- a. Include all tank systems (process and storage)
- b. At least 12 months prior to receipt of hazardous waste

[401 KAR 39:090 Section 1, 40 CFR 264.192(g)]

16. Submit to the Division, documentation of Updated KY Emergency Management Approval.

- a. A certification that the Emergency Response Plan is approved for Agent Operations
- b. Prior to receipt of hazardous waste

[KRS 224.50-130(3)]

17. Submit to the Division, documentation of Updated Host County Certification.

- a. Certifying compliance with KRS 224.50-130(8)(a) and (b)
- b. Prior to receipt of hazardous waste

[KRS 224.50-130(8)]

18. Submit to the Division, Notification Call Down Instructions at least 30 days prior to receipt of hazardous waste.

[KRS 224.50-130(3)]

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19. Submit to the Division, notice of successful completion of the U.S. Army's Operational Readiness Review prior to receipt of hazardous waste.

[KRS 224.46-530(1)(g), KRS 224.50-130(3)]

20. Submit to the Division, Request for Approval Prior to Start of Agent Destruction Operations.

- a. At least 15 days prior to receipt of hazardous waste
- b. Letter requesting approval shall document that all Compliance Schedule Items, with the exception of the Operational Readiness Review, Closure Plan, Hydrolysate Analysis Report, and Pilot Test Demonstration Report, are completed
- c. Division approval letter required prior to receipt of hazardous waste

[KRS 224.46-530(1)(g), KRS 224.50-130(3)]